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EMPOWERING TRANSFORMATION THROUGH STRUCTURE:
ASSESSING EFFECTIVENESS ON THE ORGANIZATIONAL PLACEMENT OF
INSTITUTIONAL RESEARCHERS

By

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Abstract

Higher education has a rich history steeped in the assumed trust of academia; however, shrinking resources have increased the demand for more objective assessment. Institutional Researchers (IR) have emerged as agents of change, adding college-wide assessment to their responsibilities alongside pragmatic reporting (Ross & Swing, 2016; Terenzini, 2012). As data-driven culture is still a relatively new institutional framework, IR may hold the key to engendering trust around this new status quo (Kirby & Floyd, 2016). This study explored the role of organizational structure in promoting the strategic success of Institutional Researchers. The researcher examined eight field professionals through the conceptual lens of transformational leadership. Each participant willingly participated in a triangulated data collection strategy which employed a formal document review; written qualitative survey; and semi-structured, qualitative interview. The data collected highlighted four key emergent themes that are indicative of successful strategic IR, including the role of proximity to central leadership, strong supervisory support, and shared actions. The study findings suggest that taking action to empower communication with senior leaders and advocate for managerial support are imperative to advancing strategic IR. In addition, the study illuminated several ways that institutional leaders can cultivate professionals who support a data-driven, assessment-focused culture.

Keywords: Institutional Research, Transformational Leadership, Effectiveness

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CHAPTER 1

INTRODUCTION

Higher education has long benefited from an undisputed affirmation of its worth and scholastic value resulting in an implicit trust (Chirikov, 2013; Terenzini, 2012; Volkwein, 2008). However, this entrenched trust began to erode in the presence of fewer financial resources for higher education combined with more institutions (Terenzini, 2012). According to current research, restoring any lost confidence in educational institutions will involve implementing transformational change and evidence-based assessment unlike the academic community has ever experienced (Calderon & Mathies, 2013; Johnston, 2011). This emergent need for objectivity has nourished the emergence of the field Institutional Research (IR), whose professionals soon became the main *agents of accountability* on their campuses (Terenzini, 2012). While the evolution of IR is well documented, its unplanned emergence has contributed to inconsistencies in effectiveness and variations in structural application (Chirikov, 2013; Parmley, 2009; Volkwein, 2008). Cultivating a better understanding of the more effective structures that empower Institutional Researchers and steward their strategic inclusion in collegiate decision-making was the primary goal of this study.

Research suggests that organizations of higher education increasingly support the expansion and standardization of the use of empirical information to drive institutional directives and provide rationale for funding (Reichard, 2012; Taylor et al., 2013; Terenzini, 2012). Adjacent to higher education “the efficiency movement in business and industry” (Reichard, 2012, p. 4) demonstrates the benefits of professionally managing data. Implementing such a data practice entails measuring effectiveness quantitatively as opposed to placing singular value on anecdotal or experiential assumptions. Accordingly, the consumers and funders of higher

education are demanding more informatics with respect to relative success and educational outcomes (Terenzini, 2012). Additionally, the work of Taylor, Hanlon, and York (2013) provided critical insight into the need for unbiased, professional administrators who would translate raw data into meaningful, actionable information. Taylor et al. (2013) suggested a maturity model for colleges and universities that measures the extent to which data-driven decision-making had replaced traditional, more subjective means of quantifying contemporary institutional progress (p. 69).

Many early manifestations of Institutional Research took the form of compartmentalized professionals or departments primarily charged with managing and ensuring compliance with local, state, and federal reporting mandates (Reichard, 2012; Terenzini, 2012). Institutional Researchers quickly became recognized as agents of accountability through the gathering, scrubbing, and submitting of data to the appropriate educational authorities. External educational authorities include the National Center of Educational Statistics (NCES), the National Student Loan Data System (NSLDS), regional accreditation bureaus, and the College Board. As measures became more numerous, complex, and powerful, the corresponding role of Institutional Researchers became more critical, impactful, and influential within educational communities (Seybert, 1991; Swing & Ross, 2016).

Institutional Researchers shoulder tremendous responsibility and must accurately interpret survey rules and requirements to provide data that meets the specified parameters (Kirby & Floyd, 2016). Field professionals serve an operational role that affords them a unique and comprehensive perspective on the quantitative health and trajectory of the institutions in which they serve as well as benchmarking against the greater educational community (Ronco, 2012; Terenzini, 2012). With increased organizational influence in educational organizations

comes greater responsibility, which is often paired with potential professional growth opportunities. The Institutional Research perspective and its broad knowledge of data measures present a transformational opportunity for senior leadership to incorporate objective informatics into upper-level strategic planning and decision-making. Trusted organizational advisors often find themselves on the leadership track, guided by the trust and value their contributions engender among key stakeholders (Kirby & Floyd, 2016).

The wide-angle perspective afforded to many field professionals makes Institutional Researchers highly sought out throughout educational communities that value objectivity and the robust assessment of their effectiveness (Parmley, 2009; Terenzini, 2012). However, the development and implementation of Institutional Research as a strategic resource beyond responsive reporting has not been universal (Johnston, 2011; Taylor et al., 2013; Terenzini, 2012). Johnston (2011) emphasized that Institutional Researchers provoke a dichotomous response, specifically highlighting that collegiate stakeholders appear to either embrace Institutional Researchers or wince in their presence (p. 60). A combination of professional origin, collegiate resources, and motivation to evolve toward objective assessment has differentiated the structural presence of IR departments on modern campuses (Johnson, 2011; Parmley, 2009; Terenzini, 2012).

Parmley (2009) acknowledged that in less evolved educational organizations, Institutional Researchers are often not included in decision-making early enough and are instead included as confirming addenda to change initiatives. There are many unique organizational qualities within higher education institutions that impact the ability for Institutional Research professionals to maintain a presence in upper-level administration including: shared governance, abstract organization charts, and varying levels of decision-making (Goomas & Isbell, 2015;

Parmley, 2009; Terenzini, 2012). Much of the current research documents variation in organizational placement of Institutional Research alongside the importance of interdepartmental relationships and cultivating trust (Hurst, Matier, & Sidle, 1998; Kirby & Floyd, 2016, Parmley, 2009; Terenzini, 2012). However, despite the observable variation in both the strategic penetration and organizational placement of Institutional Researchers, little is currently known about the connection between the two variables.

As the duties and responsibilities for Institutional Researchers increase in scope and importance, identifying structural configurations that support transformational change and promote effective strategic integration become paramount. Understanding the connection between the structural placement and strategic effectiveness for Institutional Researchers may potentially clarify some of the ambiguity (Terenzini, 2012, p. 147). Additionally, illuminating the strategic value of Institutional Researchers through their more successful structural configurations may serve to further legitimize the professional field both inside and outside of higher education.

Statement of the Problem

Objective assessment in higher education has led to an increased demand for accountability measures and institutional data. Institutional Research has emerged as a professional field serving the data needs of internal and external collegiate audiences (Reichard, 2012; Taylor, Hanlon, & York, 2013; Terenzini, 2012). Constricted educational resources have also led to an increased demand for efficient and unbiased strategic decision-making to drive resource allocation (Polk-Conley & Squires, 2012; Taylor et al., 2013; Terenzini, 2012). The objective assessment of institutional effectiveness represents a transformational shift away from

a traditional paradigm based on individual scholarship and academic assumption (Polk-Conley & Squires, 2012; Terenzini, 2012).

Research has demonstrated that strong interdepartmental relationships are important for cultivating trust during times of transformation (Hurst, Matier, & Sidle, 1998; Kirby & Floyd, 2016, Parmley, 2009; Terenzini, 2012). Variation in the efficacy of Institutional Researchers has been observed where lacking relationships and antiquated academic values have obstructed the migration towards quantitative objectivity in strategic institutional decision-making (Calderon, & Mathies, 2013; Hurst, Matier, & Sidle, 1998). Finally, Institutional Researchers vary greatly regarding their placement within organizational structures and hierarchies, which may affect their ability to mobilize cultural change and build the stakeholder relationships they need (Chirikov, 2013; Volkwein, 2008). Discovering favorable organizational structures for field professionals that nourish a climate of evidence-based decision-making drove the need for this study.

While the importance of strong relationships is established throughout existing research, and the variation in organizational placement is known, optimal placement for fostering relationships and transformational effectiveness has not been well understood. It is the researcher's belief that increased understandings of the organizational structures that better support Institutional Researchers in their emergent roles can nurture transition towards an assessment-based mindset. With more effective Institutional Research structures in place, the overall benefits to organizational health and prosperity would be significant.

Purpose of the Study

The overall purpose of this qualitative phenomenological study was to explore and examine the role of organizational structure for promoting the effectiveness of Institutional

Research departments as transformational leaders advancing the strategic use of data in process augmentation and collegiate decision-making. This study sought to discover how different structural configurations of IR support or hinder the cultivation of evidence-based decision-making resulting in institutional practices that value objective assessment and evaluation. The researcher reviewed pertinent documentation, surveyed participants, and conducted interviews within a purposeful sample of Institutional Researchers from a State community college system. Each participant represented a unique structural manifestation of IR thus achieving a scaled maximum variation perspective of the phenomenon (Bloomberg & Volpe, 2011; Merriam, 2009). Knowledge of the more effective structural configurations of Institution Research departments could help institutions better promote strategic success of their respective professionals.

Research Questions

This exploration directionally culminated with the original research question: What is the perceived relationship of organizational placement on Institutional Research professionals with departmental effectiveness, transformational leadership, and the institution's culture of strategic, data-driven, evidence-based decision-making?

Some related and contributory research questions included:

- What do the participants perceive as effective strategic Institutional Research?
- What are some of the different structural placements for Institutional Research departments within the sample?
- How does the sample describe the benefits or opportunities that IR professionals face related to their particular structure?

- How does the sample describe the limitations or challenges that IR professionals face related to their particular structure?
- How does each participant's IR configuration support important relationships with stakeholders?

Conceptual Framework

Seybert (1991) highlighted the presence of departmental mission, data publication, and penetration into senior level decision-making and planning as hallmarks of productive and progressive Institutional Research alongside institutional maturity. Accessible and actionable data and analytics presented a transformational shift away from the direct data service role that pragmatic, compartmentalized Institutional Research is focused on (Ross & Swing, 2016; Terenzini, 2012). Most transformational leaders endeavor to balance structural objectivity and autonomy with building relationships with stakeholders across the organizational landscape (Kirby & Floyd, 2016). Northouse (2013) summarized that true transformational leadership characterizes “the process whereby a person engages with others and creates a connection that raises the level of motivation and morality in both the leader and follower(s)” (p. 186). The researcher assessed successful strategic integration of IR by evaluating the transformational migration toward evidence-based operations and planning by promoting enterprise-level effectiveness and efficiencies.

Transformational leadership and transformative learning were the key complimentary theories chosen to anchor this study's theoretical framework. At its core “transformational leadership is more facilitative of educational change and contributes to organizational improvement, effectiveness and school culture” (McCarley, Peters, & Decman, 2016, p. 323) that aligns with the mission of strategic Institutional Researchers. Northouse (2013) similarly

emphasized that “transformational leadership is concerned with improving the performance of followers and developing followers to their fullest potential” (p. 191). Through this conceptual lens, effective Institutional Researchers impact procedural change and cultivate growing operational capacities for education professionals. Furthermore, differentiated growth and support the researcher has observed in his colleagues and the published literature directed this research towards the profession’s development.

Transformational leaders distribute actionable authority and ownership of change among stakeholders, and such a dissemination of power could cultivate buy-in regarding the cultural shift strategic Institutional Research and data integration represent (McCarley et al., 2016, p. 325). Transformational leadership presents a holistic and enlightened platform from which to facilitate change and cultivate innovation. Connecting organizational placement with the transformational aspects of Institutional Researchers was the core theoretical perspective for this study. This perceptual lens allowed the researcher to characterize the relative effectiveness of different IR structural configurations with respect to strategic integration and institutional maturity. “Whereas transactional leadership results in expected outcomes, transformational leadership results in performance that goes well beyond what is expected” (Northouse, 2013, p. 193) and exceeding the pragmatic role of IR is precisely what this study sought to explore.

Assumptions, Limitation, and Scope

The researcher for this study is a management-level career Institutional Researcher with substantial experience and exposure to different configurations for Institutional Research. The researcher has observed that a higher-rank within an organizational structure does not directly correlate with increased effectiveness for Institutional Researchers regarding the advancement of evidence-based decision-making. The researcher specifically designed this study to gather and

interpret information about the relative success of various organizational configurations for Institutional Research with a foreknowledge of and accommodation for any biases held by the researcher. Bracketing was used to isolate and excise any emergent bias that surfaced in the notes and transcriptions of the researcher's interactions with study participants. The practice of bracketing is largely effective but fallible since "the extent to which any person can bracket his or her own biases and assumptions is open to debate" (Merriam, 2009, p. 26). Accordingly, the researcher excluded his home institution from the study and conducted all of the interactions with the research participants through official State system contact channels.

Institutions with different Carnegie classifications undoubtedly utilize, support, and define the objectives of their IR departments through their own unique perspective. For-profit, business oriented institutions, which are tuition driven, may have different priorities for Institutional Researchers than private, non-profit institutions with large endowments and less concern around meeting operating costs. Community Colleges occupy a unique niche, largely serving populations that are considered non-traditional in the higher education student market. Van Noy and Heidkamp (2013) summarized that "community colleges have a long history of serving nontraditional students, including working adults as well as many minority, low-income, first-generation students, and students with disabilities; the average age of a community college student is 29" (p. 3). Much of the data mined and analyzed by community college Institutional Researchers is used to understand and recruit this emergent population of potential learners (Van Noy & Heidkamp; 2013). To minimize the impact of varying demands and missions for Institutional Researchers, research participants for this research study were a purposeful sample of IR professionals heralding from 2-year, public, non-profit, small to medium-sized institutions (i.e. community colleges and technical/vocational institutions).

Institutional Research departments range in size from single part-time employees to fully-staffed departments dependent on factors such as institutional size, available financial resources, and the overall value placed on evidence-based decision-making. While the target variable for this study was organizational placement regarding relative effectiveness in strategic initiatives, the size of the department and more robust resources in both human talent and quantity could have been a confounding variable to this work. While larger departments are not universally connected with increased effectiveness or yield, the variations in operational capacity had a strong probability of playing a role in the successful integration of Institutional Researchers into strategic development and action. Part of the codification process was to characterize participants regarding department size thus acknowledging the role of that variable while maintaining and qualitatively focusing on the role of organizational placement.

Finally, unique political structures and variations in the degree of support from senior leadership (i.e. College Presidents and Deans) certainly serve as contributing factors to IR's inclusion at the decision-making table. Bolman and Deal (2008) stressed that while "Institutional Researchers...can bring a much-needed analytical and architectural focus...it is also important to frame implementation from the perspective of building support where needed" (p. 78). For this reason, the qualitative exploration of IR effectiveness related to penetration into strategic, institutional decision-making incorporated an assessment of the stakeholder buy-in and supportive relationship that have been cultivated by the research participants. Transformational leadership reaches beyond transactional accomplishments, meaning that strategic effectiveness hinges on a successful navigation of the political landscape. Recognizing and characterizing long-lasting, collaborative professional relationships served as a key indicator for the strategic

effectiveness of Institutional Researchers within each participant's collegiate setting (Kirby & Floyd, 2016)

Significance

This study sought to discover the role and significance of organizational structures regarding the strategic effectiveness of Institutional Research departments in higher education administration. Institutional Researchers have unique access to data and information that is unmatched by other operational areas of their institutions (Chirikov, 2013; Terenzini, 2012). Given this unique access to data, it is important that colleges and universities understand how to best leverage IR and utilize data to support evidence-based decision-making. While Institutional Researchers universally champion data integration, they also meter information to support optimized use thus avoiding what researchers know as *analysis paralysis* (Gagliardi & Wellman, 2014; Kirby & Floyd, 2016). Institutions produce virtual mountains of summative and predictive information across each of their operational areas. Without effective IR officers, filtering actionable information from bulk data can be a cumbersome task (Gagliardi & Wellman, 2014). Metering data and stewarding *institutional intelligence* (communicating the analytical meaning behind raw data) is a benchmark of successful strategic informational research (Terenzini, 2012).

Definition of Key Terms

Carnegie Classification of Institutions of Higher Education. A method for grouping colleges and universities based on defining characteristics such as public/private, 2-year/4-year, setting, size, etc.

Data Warehousing. The act or practice of storing live or frozen (snapshot) data in a location isolated from the operational relational database. Data warehouses are intended to preserve sensitive data for future institutional reporting and trending analyses.

Integrated Postsecondary Education Data System (IPEDS). A collection of annual surveys administered to all nationally-funded colleges and universities by the National Center for Education Statistics (NCES), a part of the Institute for Education Sciences within the United States Department of Education.

Regional Accreditation Agencies. A collection of geographically specific accreditation bodies that serve to legitimize and insure a level of rigor for colleges and schools across the United States. Regional accreditation agencies across the US include: The Higher Learning Commission (HLC), New England Associate of Schools and Colleges (NEASC), Northwest Commission on Colleges and Universities (NWCCU), Middle States Commission on Higher Education (MSCHE), Southern Association of Colleges and Schools (SACS), and Western Association of Schools and Colleges (WASC).

Conclusion

Although Institutional Research is still a relatively young field, it first emerged as a gatekeeper for campus informatics and later a critical component for transforming the nature of the trust placed in academia. There are many variables that contribute to the success of any organizational function, and Institutional Research is no exception. However, one of the most variable and least understood is the structural placement and environment for departments of Institutional Research.

Throughout Chapter 2, the researcher reviews a brief history of IR's creation along with its evolution into the strategic role it has the potential to serve in today. A combination of transformational leadership and transformative learning is used to frame the impact of an increased understanding of optimal structural placement for IR offices. In Chapter 3 the researcher outlines the methodologies employed to conduct this phenomenological study. The

qualitative inquiry assesses the effectiveness of various IR offices using models of institutional maturity denoting transformational progress away from primary anecdotal assumptions for institutional success.

The fourth chapter qualitatively codifies and characterizes the result for analysis and presents the findings from the sample of participants. The results are organized by relevance as determined by the emergent themes. The closing chapter interprets the findings and postulates implications in light of the study's purpose and the significance proposed in the first chapter of this dissertation. This work concludes with final summative thoughts and outlines any emergent potential topics that arise from this work that could further advance the field.

CHAPTER 2

LITERATURE REVIEW

In recent years, the implicit trust attributed to the academic community has begun to erode in the wake of a decreased financial resource pool being diluted amongst an increased number of institutions (Terenzini, 2012). The universal constriction of educational resources has illuminated the need for unbiased, professional stewards of institutional intelligence, translating raw data into meaningful, actionable information (Chirikov, 2013; Taylor, Hanlon, and York; 2013; Volkwein, 2012). Terenzini (2012) elaborated on this observation stating that “colleges and Universities have come under close public scrutiny, and I think it quite unlikely that [they] will ever regain the level of public and legislative trust, respect, and financial protection they [once] enjoyed” (p. 144). Emergent data technologies and complementary web portals have been designed to communicate information directly to consumers independent of normative academic translation or scholarly interpretation (Terenzini, 2012). The extent to which data-driven decision-making replaces traditional, more anecdotal, and subjective means demonstrates an institution’s progressive maturity and ability to adapt to the increasing demand for assessment and accountability (Taylor et al., 2012, p. 69).

The emergence and evolution of Institutional Research as a field is well understood and documented both domestically and internationally (Taylor et al., 2013; Terenzini, 2012). However, the implementation of Institutional Research as a strategic, central service is not as well defined and much more variable. The purpose of this study is to connect variations in the placement of Institutional Researchers, their variable backgrounds, and professional interdepartmental relationships with their relative effectiveness in advancing the strategic use of data in process augmentation and high-level decision-making. Research has demonstrated

variation in the organizational placement of Institutional Research alongside the importance of interdepartmental relationship and the cultivation of trust (Hurst, Matier, & Sidle, 1998; Kirby & Floyd, 2016; Parmley, 2009; Terenzini, 2012). This exploration directionally culminates with the original research question: What is the perceived relationship of organizational placement on Institutional Research professionals with departmental effectiveness, transformational leadership, and the institution's culture of strategic, data-driven, evidence-based decision-making?

This literature review addresses many of the mechanisms that contribute to the aforementioned variation in form and effectiveness for contemporary Institutional Researchers. Specifically, this review outlines the origins of the field, the traditional role of Institutional Research professionals, the tiers of intelligence (Terenzini, 2012) that have catalyzed the field's evolution, and the differentiated adoption of the field as a more strategic beyond responsive data reporting. Additionally, this review explores some of the alternate perspectives and opposition to Institutional Research's advancement and presence as an authority on institutional intelligence, and explores the important structures and relationships that promote effectiveness.

Institutional Research: Origins

Reichard (2012) stated that the field of Institutional Research began in the early 20th century when the emerging "scientific spirit in education" (p. 4) ignited the *Survey Era*. Traditionally, input from students and institutional service areas was considered superfluous as the intrinsic trust in established academia was widely viewed as beyond challenge (Reichard, 2012; Terenzini, 2012). The demand to gather response information for measuring the effectiveness of higher education arrived once "the unchallenged pedestal on which society had placed colleges and universities and their degrees [began] to crumble" (Terenzini, 2012, p. 144). In addition to the emergent scientific perspective in measuring assessment in higher education,

“...the efficiency movement in business and industry” (Reichard, 2012, p. 4) adjacent to higher education also stimulated a need to professionally manage data and measure effectiveness quantitatively as opposed to placing absolute value in anecdotal and experiential assumptions.

During this time of fading trust in the colligate establishment, outcomes graduated from the observed quality of individual products to emergent, comprehensive, and quantitative benchmarks of success (Ronco, 2012; Terenzini, 2012). Reichard (2012) claimed that “the most prominent advocates for the establishment and training of Institutional Research personnel where the American Council on Education (ACE) at the national level” (p. 6) in the United States with regional compacts established in the 1940’s and 1950’s, including the New England Board of Higher Education (NEBHE). Institutional Research expanded rapidly across many campuses between the 1950’s and 1960’s resulting in a professional field that went from its inception to approaching omnipresence in a single decade (Reichard, 2012; Terenzini, 2012). Reichard (2012) reported that “by 1964, there were 115 institutions with a bureau or official charged with the responsibility for conducting Institutional Research” (Reichard, 2012, p. 6).

Proficient and effective Institutional Research officers became increasingly critical to evaluating organizational needs and establishing metrics to be used in benchmarking (Ronco, 2012; Terenzini, 2012). Ronco (2012) explained in his analysis that a core purpose of Institutional Research is to highlight processes that promote improved efficiency and effectiveness and then cultivate them through a continuous cycle of assessment and subsequent refinement (p. 15). Since large-scale objective oversight was still new, compared with the traditionally scholastic academic perspective, Institutional Researchers materialized in a variety of forms. Institutional Research began cropping up in constructs ranging from full standalone departments, to full-time officers, to ancillary responsibilities added as addenda to existing part-

time and full-time administrative professionals. The latter forms were, and continue to be, most prevalent when institutional resources do not accommodate a comprehensive staff or even a full-time administrative professional (Kirby & Floyd, 2016; Seybert, 1991; Terenzini, 2012).

A pivotal landmark in the formation of traditional Institutional Research in the United States was the creation of the Association for Institutional Research (AIR), the first annual meeting of which was held in Boston in May of 1966 (Reichard, 2012, p. 9). Establishing AIR gave Institutional Researchers a forum for comparing procedures and cultivating solutions to the questions that educational boards and accrediting bodies were beginning to ask. This practice strengthened the robust quality of institutional information and increased the comparability of data between institutions (Chirikov, 2013; Reichard, 2012). The increased cross-institutional compatibility of Institutional Research data combined with growing scientific perspectives in higher education began decompartmentalizing Institutional Researchers in the years and decades subsequent to the initially documented creation of the profession (Reichard, 2012; Terenzini, 2012).

The Tiers of Institutional Intelligence

According to Terenzini (2012), every Institutional Research professional relies on three specific levels of core competence: technical/analytical intelligence, issues intelligence, and contextual intelligence (p. 137). While the original tiers of intelligence were crafted by Terenzini in 1992, it is his 2012 re-examination of the work that explicates the drivers for the profession's progress. Tier 1, technical/analytical intelligence, demonstrated significant growth in the complexity and adaptability of the tools Institutional Research professionals use to gather, maintain, and harvest data to meet research initiatives. While proficiency in the current and emerging software tools is an important quality of effective Institutional Researchers, Terenzini

(2012) cautioned field professionals about the dangers of becoming over-committed to valuing the functionality of the tools over their purpose in the trade (p. 139). Terenzini (2012) highlighted some of the specific pitfalls that await institutions and researchers who report data and pursue analyses without institutional intelligence or strategic direction including “data without information, processes with purposes, analyses without problems, and answers without questions” (p. 139). Moreover, Terenzini (2012) referenced an over-commitment to the procurement of new tools for the sake of a technological “wow factor” as a means for undermining the strategic effectiveness of Institutional Research officers. “My caution is to avoid choosing study topics, not because they are important, but because they will let us [IR] use one or another of those really cool new toys” (Terenzini, 2012, p. 140).

Balancing technological function in harmony with intended purpose is an important regulatory responsibility of an effective Institutional Researcher, ensuring that mined data is collected with distinct purpose and not to exhibit ability. Huynh, Gibbons, and Vera (2009) studied the evolution of technologies inherent to successful Institutional Research and claimed that the interpretive responsibilities of Institutional Researchers had not significantly changed despite the advent of new technologies. Huynh et al. (2009) stated that “technology is the means to the end; the vehicle that supports the process [of Institutional Research]” (p. 60). However, other innovative technologies currently available to Institutional Research make the raw data more accessible and customizable, which creates more availability for information analysis both inside and outside of the department (Terenzini, 2012).

Today, Institutional Researchers are often “deluged by demands for data collection and report writing that blot out time and attention for deeper research, analysis, and communication” (Gagliardi & Wellman, 2014); thus, being the single conduit for the flow of information is no

longer effective. This is where empowering colleagues in areas of institutional expertise through technological access to defined data can be useful, but consumers of direct data channels must be trained and knowledgeable in data interpretation for such tools to be useful. Closing this skills gap is a key component to fostering innovation and empowering stakeholders to employ technological solutions that reduce the routine demand on Institutional Researchers for obtaining previously refined data (Ritz & Bevins, 2012, p. 97). Rather than focusing on raw data mining, the strategic Institutional Researcher assists in the interpretation of data that is mined through automated or published channels (Kirby & Floyd, 2016; Reichard, 2012).

Determining the importance and significance of data is the more strategic role assigned to Institutional Researchers. Overall, this perspective stresses being “clear about why the question they are trying to answer is important” (Terenzini, 2012, p. 140). Characterizing the increasing demand for developmental education at the post-secondary level exemplifies Institutional Research’s power when it comes to addressing emerging contemporary needs. Polk-Conley and Squires (2012) examined how Institutional Research advances community colleges’ understanding of developmental education demands and is critical to evaluating Institutional Research’s operational effectiveness as a central respondent to a specific contemporary institution-wide dilemma. The metrics developed and described by Polk-Conley and Squires (2012), embody the power of stewarding institutional intelligence through effective strategic use of Institutional Research (Polk-Conley & Squires, 2012, p. 16).

Contextual intelligence, Terenzini’s third tier, signifies another important area of growth and focus for Institutional Research professionals (Terenzini, 2012). Specifically, this tier combines the first and second tiers to form a synergy between technical skill and content relevance to balance data against purpose. Originally, contextual intelligence was internally

focused and while most institutions house their IR functionality outside of informationally heavy functional areas, such as the Registrar, Admissions, and Financial Aid, a successful Institutional Researcher must partner with institutional stakeholders to cultivate buy-in and secure context (Kirby & Floyd, 2016; Ross & Swing, 2016). However, upon reexamination, Terenzini (2012) cited the rapid growth of Institutional Research and data-driven decision-making as necessitating the expansion into the national and international higher education communities. The data-based intelligence that Institutional Researchers' steward among campus stakeholders has broadened in scope beyond the immediate service community. "IR professionals must become more fully aware of our institution's external worlds...and the forces shaping what is happening on our campuses" (Terenzini, 2012, p. 145). Expanding on the rationale presented by Terenzini (2012) there are three emergent trends that Calderon and Mathies (2013) stressed: "The continued massification of higher education (HE), [the] increasing ties of [higher education] to economic development, and [the] continued evolution of HE institutions into more complex organizations" (p. 77).

In summation, Terenzini (2012) acknowledged that the pragmatic roles of Institutional Research professionals have evolved functionally, but not in direct application between 1992 and 2012, by stating, "The tools have become increasingly sophisticated, but 'analysis' remains Institutional Research's core business" (p. 146). However, the strategic importance of Institutional Research has expanded and is forecasted to continue advancing in institutional, national, and international importance. Terenzini (2012) emphasized that "IR professionals...have a vitally important role to play in campus and national discussions of what constitutes 'educational effectiveness'...Institutional Researchers are the boundary spanners" (p. 146).

Building on the Traditional Role of Institutional Research

As the field grew in volume and measures became more numerous, complex, and powerful, the corresponding role of Institutional Research professionals became more critical, impactful, and influential (Seybert, 1991; Swing & Ross, 2016). Terenzini (2012) has served as a core contributor to understanding the field of Institutional Research from its birth through much of its evolution. In his inquiry, Terenzini (2012) emphasized that defining the role of Institutional Research to those outside of higher education was a challenging task particularly because the duality between pragmatic reporting and strategic stewarding of intelligence is inconsistently defined by different institutions (p. 147).

Many outside the field of higher education do not fully comprehend the dynamic nature of institutional data and the numerous entities to which federally-funded institutions are accountable (Chirikov, 2013). Chirikov (2013) stated that “defining IR is not an easy task. Most definitions emphasize the functional [pragmatic] aspects of Institutional Research and note that it is directed towards the support of management at the institution” (p. 457). However, internal and external audiences are often ignorant of how Institutional Researchers accomplish their reporting tasks. Stakeholders continued to ask what the core components and resources are that empower an effective Institutional Researcher as an *agent of accountability* (Swing & Ross, 2016; Terenzini, 2012).

According to Volkwein (2008), the backgrounds of Institutional Research professionals vary significantly, coming from business, education, humanities, mathematics, natural science, and social science. This variation creates both strengths and weaknesses for Institutional Research as a field and network of intercollegiate professionals. On one hand, the variation deleteriously affects the professionalism of Institutional Research and fractures the reliability

between Institutional Researchers (Volkwein, 2008; Chirikov, 2013). However, the same diversity “promotes a multifaceted view of the institution, particularly when people with different backgrounds work together” (Chirikov, 2013, p. 465). The diverse perspective IR professionals hold positions them well to establish potential relationships with institutional stakeholders and data-heavy departments.

An important traditional characteristic that has guided Institutional Research towards becoming a more trusted central resource is their penchant for comprehending data request forms (Terenzini, 2012). Field professionals must accurately interpret survey rules and requirements subsequently providing data that meets the specified assessment parameters (Kirby & Floyd, 2016). Institutional Research carries a tremendous level of responsibility on multiple fronts as there are steep penalties for major mistakes when it comes to meeting external data demands (Kirby & Floyd, 2016). As shepherds of institutional metrics to numerous external reporting bodies, Institutional Researchers gather a great deal of insight into nearly all parts of the collegiate community (Chirikov, 2013; Parmley 2009; Terenzini, 2012). This insight serves Institutional Research well when tasked as transformational leaders mobilizing change towards evidence-based decision-making.

Progression and Evolution of the Field

As national buy-in for the broader use of Institutional Research professionals increased through the latter half of the 20th century, the Association of Institutional Research recognized and subsequently examined an emergent duality in the field as well as in their organizational mission (Reichard, 2012). Reichard (2012) posed the question of whether “the association [was] to be theoretical in nature, intended to contribute to basic understandings of the higher education enterprise, or was it to be concerned with problems of a purely operational nature?” (p. 12). This

existential question served as a turning point for the field of Institutional Research, denoting when field professionals began to embrace a broader purpose outside of satisfying pragmatic external reporting demands.

Throughout their growth as professionals, Institutional Researchers have continued to emphasize efficiency in the face of limited resources in conjunction with external assessments of institutional effectiveness, student learning outcomes, and general collegiate accountability (Seybert, 1991). Technological tools have helped to advance the capacity of Institutional Researchers by reducing the bottleneck on information flow (Seybert, 1991; Swing & Ross, 2016; Terenzini, 2012). The field of Institutional Research has stood as the one source of truth since its inception, however, data guardians now find themselves coaching a wide array of data consumers, maintaining institution-wide data and analytical requirements, and balancing information supply and demand, also known in the field as stewarding institutional intelligence (Polk-Conley and Squires, 2012; Ross & Swing, 2016; Terenzini, 2012).

Johnston (2011) researched and reported on some of the broader roles that Institutional Researchers started to take on as their technological abilities and contextual competence expanded both within and between institutions. Particularly, Johnston (2011) discussed how the purpose of Institutional Researchers in institution-wide initiatives such as accreditation and assessing institutional effectiveness evolved from completing data forms to a broader strategic lens establishing measureable goals. On self-study steering committees for accreditation, all respondents to Johnston (2011) reported that “one or more representatives from the Institutional Research office played key roles in working with the group responsible for completing the self-study document” (p. 54). Furthermore, Johnston (2011) anchored this universal participation in the fact that Institutional Researchers are proficient at constructing a descriptive narrative from

raw data (p. 54). Although this is an advisory role more than a representation of strategic leadership, the traditional acknowledgement of Institutional Research's ability to organize data as the backdrop to a directional narrative is influential in the development of the professional field.

While deciphering the requirements of data forms is important, Institutional Research also has the proprietary knowledge that "every institution has more data than it uses" (Johnston, 2011, p. 55). Accordingly, the emerging strategic role of Institutional Researchers in accreditation and assessing institutional effectiveness centers on transforming raw data into relevant information (Johnson, 2011; Terenzini, 2012). As Johnson (2011) explained, "IR offices can be of significant service to the institution, especially when there has been a history of limited understandings of data and its uses" (p. 57). Explicitly, Institutional Research can facilitate defining institutional success, helping the institution learn the value of negative (non-supportive) findings, and finally make measureable progress assessing student learning (Johnson, 2011, p. 57). Holistically, Institutional Research officers can close the loop on the process of responding to data interpretations whether or not the data is supportive of the hypotheses and preconceptions.

Regional accreditation agencies, such as the New England Association of Schools and Colleges (NEASC), are stepping up the required frequency of assessment cycles, moving from a 10-year full review processes to include 5-year interim reports. In addition, the regional accreditation agencies are issuing substantive change requests for major curricular alterations. With this in mind, employing Institutional Researchers to facilitate college planning significantly increases college leaders' ability to respond to regional accreditation agencies (Johnson, 2011). Overall Johnson (2011) stressed that "the Institutional Research office can serve a helpful

function by helping the self-study team be more realistic in its expectations for accreditation periods” (p. 58). Additionally, Johnston (2011) predicted that “...under new and emerging accreditation requirements that emphasize continuous improvement and clearly defined results, presidents and chief academic officers will need to rely more on their Institutional Research office” (p. 60).

Herndon (2012) referenced improvement in external consumer information about college successes, citing the advent of centralized Institutional Research as a principal factor in the continued improvement of such data sets. Herndon’s case study of the Virginia Education Wizard, a consumer platform developed to guide potential learners through career planning and college applications, further embodies the value that wider-scoped Institutional Research has for promoting data integration in the reform of higher education standards (Herndon 2012).

Issue Intelligence and the Inclusion of IR

The evolving importance of issue intelligence in Institutional Research is not only essential for cultivating strategic trust in Institutional Research professionals, but also supports evidence-based decision-making. Terenzini’s second tier of intelligence stresses the importance of “both substantive and procedural or process dimensions[and] includes knowledge of the kinds of issues and decisions that middle- and upper-level administrators in functional units face” (Terenzini, 2012, p. 141). As Terenzini (2012) emphasized, “Without the evidence, you’re just another somebody with an opinion”, a perspective that in some ways embodies the expired evidence-deficient, scholar-based expertise that Institutional Researchers challenge (p. 142). The synthesis of Terenzini’s first two tiers illuminated Institutional Research professionals as the emerging *gatekeepers of objectivity*, championing the holistic understanding of institutional goals and combining those realizations with scientific inquiry in the realm of context.

Contextual Intelligence and the College Community

Parmley (2009) acknowledged that in less evolved collegiate organizations Institutional Researchers are often not brought into decision-making early enough and are instead included as confirming addenda to change initiatives. There are many unique organizational qualities within higher education institutions that make it challenging for field professionals to secure and maintain a line to the leadership team such as shared governance, abstract organization charts, and varying levels of decision-making (Goomas & Isbell, 2015; Parmley, 2009; Terenzini, 2012). Parmley (2009) directly referenced Institutional Research's ability to leverage *contextual intelligence* (Terenzini, 2012) as a core reason for promoting a place for Institutional Research at the highest levels of institutional decision-making and strategic planning (p. 77).

In the closing of his study Johnston (2011) stated that although the progression and inclusion of Institutional Research within strategic initiatives was widespread, the degree to which its inclusion penetrated academic cultures and structures varied from one institution to another (p. 60). Johnson (2011) emphasized that Institutional Researchers provoke a dichotomous response, specifically highlighting that collegiate stakeholders seem to either embrace Institutional Researchers or wince in their presence. Those resistant to objective data integration oppose, or at least stand in partial opposition to, the profession's move towards transformational leadership and strategic inclusion in institution-level decision-making. Chirikov (2013) referred to Institutional Researchers as *knowledge networks* in his research, citing the variation in Institutional Research office organization and staffing as part of his exposé on the topic (p. 456). While the placement of an Institutional Research office is often driven by securing objectivity, structural distance can also alienate the aforementioned *data owners* and key contributors to effectiveness in the role (Swing & Ross, 2016).

Barriers and Resistance to Inclusion

Cultivating interaction and cooperation between Institutional Research officers and pre-existing authoritative structures on campus is possible. Chirikov (2013) advised cultivators of successful Institutional Research departments “to stimulate a continuous interaction between Institutional Researchers and the [institution’s] administration and key departments” (p. 465). Chirikov (2013) further asserted, “For an IR office to properly perform one of its primary functions, namely, providing information necessary for administrative decisions, it must operate in concert with the [institutional] administration, deans, and other administrative figures” (p. 465). Since undocumented directional catalysts often exude more influential strategic inclusion than standard operating procedures (SOP), particularly at the leadership table, orchestration must be in response to both documented and actualized cultural power structures. Herndon (2012) stated “it is a historically held principal of microeconomics [in business] that in the presence of better information, consumers make better decisions”, and this perspective is at the core of the value Institutional Research adds to institutional effectiveness and assessment in higher education (p. 63).

Johnston (2011) noted that Institutional Research’s central role for new and emerging data caused tension among some instructional purists. In support of this assertion, Ehrenberg (2005) highlighted some challenges faced by Institutional Research professionals, particularly emphasizing that non data-driven leaders tend to undervalue Institutional Research. In order for institutions to make the best use of their Institutional Research officers and resources, collegiate leadership must invest in “educating administrators at these institutions about the usefulness of Institutional Research” as a hub of informational interconnectivity (Ehrenberg, 2005, p. 359). Unfortunately, this educational effort may not always be met with open arms, particularly by

instructional faculty, who may feel that their data from outside the institutional databases are being overwritten. Such faculty may believe “their prerogatives of academic freedom are compromised by Institutional Research offices [because they] are acting as a central clearinghouse” on campus (Johnston, 2011, p. 56). Data source compartmentalization can inadvertently isolate Institutional Research findings from other parallel efforts on campus—a practice that decreased reliance and trust in the output from Institutional Research offices (Johnson, 2011).

Volkwein (1999) expanded on some of the opposing collegiate organizational and cultural forces that hinder Institutional Research’s advancement and block them from becoming a central presence fostering evidence-based decision-making. Volkwein (1999) stated “internal demands may contrast with external demands, the academic culture differs from the administrative culture, and the institutional needs may vary from professional needs” (p. 9). Understanding these polar forces in an administrative culture helps Institutional Research professionals foster support and engender trust as emerging transformational leaders, particularly as evidence-based logic for limited funding and data-driven decision-making continues to gather credence in mainstream academic cultures. The emphasis on the duality between internal and external is critical as more of the collegiate internal audience demands a deeper understanding of the external economic climate for enrollment and student success (Swing & Ross, 2016; Terenzini, 2012; Volkwein, 1999).

Volkwein (1999) reviewed duality between the administrative and academic (particularly instructional) communities within collegiate structure. The bureaucratic model that many administrators’ champion echoes more of the business world and is often refuted by academic traditionalists. Since contemporary Institutional Research strives to promote a balance between

data objectivity and interpretation, Institutional Researchers may serve as mediators, bridging these two opposing vantage points. Serving as a cross-cultural intermediary between the administrative business model and the academic perspectives can serve to engender the trust and safety that Hurst et al. (1998) referred to in their Step Ladder Theory. Hurst et al. (1998) focused on the first three steps of Step Ladder Theory, safety, trust, and intimacy, as sociological vehicles to deconstruct the isolation that operational silos maintain versus open models founded on team-oriented, student-centered models of institutional structure (Hurst et al., 1998, p. 23). Despite the overwhelming need for centralized, broader scoped offices of Institutional Research, the presence of administrative opposition, limited funding, structural ambiguity, and adherence to convention have stunted the growth and penetration of strategic Institutional Research in many institutions.

Supporting Community and Collegial Relationships

Kirby and Floyd (2016) emphasized that the “two critical elements of generating accurate and timely reports are access to source data and expertise in the data and its caveats and nuances. To attain these elements, IR professionals must become embedded detectives at their institutions” (p. 48). Without this fundamental knowledge, Institutional Researchers will struggle to successfully investigate the aforementioned core functional areas. Terenzini (2012) did not suggest that Institutional Research professionals need to have an expert-level encyclopedic grasp of each operational area, but instead indicated “it is important for Institutional Research professionals to have something more than a cocktail party conversation-level grasp” (Terenzini, 2012, p. 142).

Parmley (2009) offered many possible avenues for promoting the central presence of Institutional Researchers, but one of the most powerful is addressing the political and structural

frames of organizations as presented by Bolman and Deal (2008). Structurally, “Institutional Researchers...can bring a much-needed analytical and architectural focus on how campuses implement decisions. However, it is also important for Institutional Researchers to frame implementation from the perspective of building support where needed” (Bolman & Deal, 2008, p. 78). (Bolman & Deal, 2008) emphasized that engendering trust as a central service is most effectively cultivated through vectors of documented and actualize organizational power. Parmley (2009) stated “the reality of raising the Institutional Research profile is that we have to use the power infrastructure at our colleges and universities...there are important relationships to cultivate with people of influence elsewhere on campus” (p. 81). Kirby & Floyd (2016) sustained this perspective stating “the ultimate goal is to develop long-lasting collaborative partnerships between IR and functional offices” (p. 51). The combination of these important organizational perspectives serves to elevate the purpose of Institutional Research departments and consequently build trust and buy-in through the information produced by more objective, evidence-based methodologies. However, there is also a critical component in communicating with and serving institutional stakeholders once the leadership perspective begins to grow. Parmley (2009) stressed that “Volkwein’s comparison of the function and customer organization of Institutional Research is a valuable tool to consider the way in which an Institutional Research function is structured and organized” (Parmley, 2009, p. 80).

Lemaire, Knapp and Lowe (2008) conducted research to uncover the structural prevalence of Institutional Researchers within the New Hampshire higher education community. Lemaire et al. (2008) discovered that nearly 50% of the 25 institutions investigated had official Institutional Research professionals on staff (p. 47). Additionally, Lemaire et al. (2008) stated that while the University of New Hampshire System and Community College System of New

Hampshire had completely separate system-level Institutional Research officers, the departments, in conjunction with other private Institutional Researchers, had formed a consortium of Institutional Research professionals self-charged with developing a common research agenda for the New Hampshire higher educational community. Their principal goals were to identify informatics that address key policy and procedural questions across all sectors of New Hampshire education, focusing data collection on student migration patterns from high school to post-secondary education, and aligning overall research initiatives among consortium member to serve as resources for decision makers and educational leaders (Lemaire et al., 2008, p. 50). This work is particularly relevant because it explores Institutional Research advancement at the highest levels and cross-institutionally.

Promoting Efficacy through Collaboration and Transformation

While the structure of Institutional Research departments varies widely across applications, the ability to gain access and expertise to each internal and external data source demands collaboration alongside objectivity. Kirby and Floyd (2016) emphasized that the “two critical elements of generating accurate and timely reports are access to source data and expertise in the data and its caveats and nuances.” As Institutional Researchers continue to grow within their respective organizations, their position acting as trusted, embedded detectives becomes increasingly important (Kirby & Floyd, 2016).

Emerging database and software technologies are integrating automation into the process of routine data procurement, thus the tactical role of field professionals as physical shepherds of raw data is changing. With this change and advancement, the importance of supporting the transformation of data to information is increasingly critical. Calderon and Mathies (2013) placed a particular emphasis on Institutional Research’s role in converting data to information, a

perspective that correlates strongly with the research goal of establishing a connection between Institutional Research efficacy and the placement of the department within the organizational structure. Because of their non-polar, data-centric perspective, “Institutional Researchers epitomize knowledge workers in many ways. They transform data into information, which enables analysis and interpretation, resulting in knowledge that is put to use to the institution’s advantage” (Calderon & Mathies, 2013, p. 82). Institutional Research professionals promote responsible data integration by understanding the balance between data-poor assumptions and analysis paralysis. Terenzini (2012) stressed “it is recognizing that research is one compromise after another, and finding a balance between rigorous, thoughtful research and its practical and prudent application remains at the heart of Institutional Research’s business and its challenge over the next decade” (p. 147). This successful balance embodies an understanding of informational context, and it is through this lens that an Institutional Research professional transitions from the role of data technician to become more of a strategic, transformational leader.

The origins of Institutional Research are grounded in collecting data, maintaining data integrity, and reporting. However, securing a seat at the leadership table involves a much wider scope of incorporating informatics into standard operating procedures (SOP) and strategic planning initiatives. Gomas and Isabell (2015) examined the expanded role of Institutional Research through their case study of the output and benefits of an exit survey developed by the department at El Centro College of the Dallas County Community College District. Through their work, Gomas and Isabell (2015) established that successful, Institutional Research led survey efforts have the ability to impact departments across the campus because their inception originates from central, less polarized perspectives. Gomas and Isabell (2015) emphasized that,

“high impact IR goes beyond data collection and reporting...[IR] manages the institution in ways that promote systemic improvements in student success” (p. 489). Through their summative conclusions, Goomas and Isabell (2015) successfully distinguished between the traditional pragmatic reporting role of Institutional Research, which still has distinctive value to collegiate community, and the emergent strategic role that is essential to objective, holistic, evidence-based decision-making.

Chirikov (2013) stated that, “IR office productivity depends on the office’s position with the [collegiate] structure; the staffing, skills, and responsibilities of Institutional Researchers; and their level of participation in the decision-making process” (p. 465). Institutional Research professionals have the ability to champion the use of baseline data to orient the planning and decision-making processes cross-institutionally. Such practices are founded on keeping the directional vector of planning objective and central to institutional goals, rather than following the impressions and inferences specific to a particular operational unit. To accomplish these goals, it is clear from the research that a combination of effective structure and relationship cultivation is imperative (Kirby & Floyd, 2016; Terenzini, 2012).

Conceptual Framework

Institutional Research is still a comparatively young profession within higher education administrations. However, its steady growth in both importance and prevalence, has been significant throughout the course of its brief history. The technologies that Institutional Researchers use have drastically improved in congruence with the computer age allowing more live data accessed through more customized and remote channels (Terenzini, 2012). While the methods for data storage and retrieval have advanced, the principle mission for Institutional Researchers has remained focused on ensuring the appropriate contextual content and relevance

of information among a sea of possible analytic avenues (Terenzini, 2012).

Parallel to the procedural evolution there has been an increased demand for more objective and quantitative perspectives within senior-level collegiate decision-making and institutional planning. Rising demand for data contradicts the implied trust that many colleges and universities have traditionally enjoyed through their academic reputations and assumed scholarly expertise. Hurst et al. (1998) advocated for deconstructing compartmentalization and operational silos through establishing relationships based on safety, trust, and transparency. Hurst et al. (1998) advocated for dismantling the perceived threat Institutional Research represents through promoting quantitative awareness and assessment in collegiate management. Terenzini (2012) supported the shift towards increased data demand by stating that "colleges and universities have come under close public scrutiny, and I think it quite unlikely that [they] will ever regain the level of public and legislative trust, respect, and financial protection they [once] enjoyed..." (p. 144). With the increase in strategic demands on researchers growing alongside their traditional pragmatic reporting roles, it is clear that the operational capacity for Institutional Researchers requires support to accommodate the higher order tasks IR professionals face (Chirikov, 2013; Kirby & Floyd, 2016; Swing & Ross, 2016). The modern Institutional Research office is more productive and serves their college's best interests if they have service penetration into high-level activities and abilities to participate in senior-level decision-making, assessment, and planning (Kirby & Floyd, 2016; Swing & Ross, 2016).

Seybert (1991) highlighted the presence of departmental mission, data publication, and penetration into senior level decision-making and planning as hallmarks of productive and progressive Institutional Research. Technological solutions designed to expand the bottleneck of

routine data beyond the Institutional Researchers are imperative. Field officers are “deluged by demands for data collection and report writing that blot out time and attention for deeper research, analysis and communication” (Gagliardi & Wellman, 2014). While access transparency may create activity availability for IR officers, it presents a shift away from the direct central service role that traditional Institutional Researchers focused on (Ross & Swing, 2016; Terenzini, 2012). To be successful, IR officers must be transformational leaders cultivating an environment conducive to change and increased live data integration.

Transformational leaders strike a balance between structural objectivity and autonomy alongside building relationships with data owners across the institutional landscape (Kirby & Floyd, 2016).

Transformational leadership is a core component alongside transformational learning for institutional stakeholders, which is why these complementary theories were chosen to anchor this study’s theoretical framework. At its core, “transformational leadership is more facilitative of educational change and contributes to organizational improvement, effectiveness and school culture” (McCarley, Peters, & Decman, 2016, p. 323), which aligns with the mission of strategic Institutional Researchers. Additionally, the differentiated growth and support the researcher has observed in his colleagues and the published literature have directed his research towards the profession’s development. Transformational leaders distribute the actionable authority and ownership of change among stakeholders affecting a stronger buy-in to the cultural shift in academia that Institutional Research represents (McCarley et al., 2016, p. 325). To connect these two variables and better understand leadership’s role in empowering IR, a sampling of Institutional Research professionals made up the participants of the researcher’s study.

Finally, because much of this literature review focused on the transition that Institutional Researchers have experienced in recent years compared with their origins in the mid-twentieth

century, it is important to examine the contemporary development of IR over the last 10-15 years. These combined factors steered the researcher towards a streamlined topic from a concept map of "understanding the role of structure and relationships in supporting professional growth for Institutional Researchers in the twenty-first century."

Conclusion

Volkwein (2008) stated summarily that the professional field of Institutional Research originated in pragmatic reporting, established primarily to meet the data demands of regional accreditation and regional/state/federal funding. The role gradually grew as consumers and educational boards demanded more comparative information about institutions that went beyond the conversational discourse and academic laurels inherent to traditional academic dogma. As the available resources matured and technology transformed the nature of institutional data warehousing, the power harnessed by Institutional Research professionals as the gatekeepers of valuable informatics began to advance the field. In time, professional communities formed, both regionally and nationally, allowing Institutional Research professionals to pool their resources and create a more cohesive and influential presence in assessment and effectiveness at the national level. Arguably, Institutional Research has become one of the fastest growing and highly demanded fields in the contemporary leadership of higher education (Reichard, 2012; Terenzini, 2012; Volkwein, 2012).

In opposition to this actualized and realized power, some traditionalists in academia have become skeptics of Institutional Research, put off by the business-like model that evidence-based decision-making it represents (Goomas & Isbell, 2015; Hurst et al., 1998; Kirby & Floyd, 2016). What does this mean for the effectiveness of Institutional Researchers themselves? How does the wide variation in organizational structure affect the productivity and strategic penetration of

Institutional Researcher on our nation's campuses? What type(s) of positions, namely reporting structures, empower Institutional Research professionals the most? Chirikov (2013) stated "the organization of IR can vary, ranging from a solo researcher attached to the president's office to centralized offices with layered structures and a division of labor. The choice of model depends on the role that Institutional Research is intended to play within the university: an information clearinghouse or think tank" (p. 467).

The presence of noted variability is not in question, but the relative effectiveness of the variants is (Chirikov, 2013). Johnston (2011) asserted "it was quite obvious that support from the president was considered critical for the IR office" (p. 60) but does that mean Institutional Research offices are most effective when they report directly to the College President? The review of the cited literature shows that the existence of variation in Institutional Research structures is well understood (Goomas & Isbell, 2015; Kirby & Floyd, 2016; Terenzini, 2012). Conversely, the relative efficacy of different specific reporting structures has not been established quantitatively, thus illuminating the need for research connecting departmental efficacy, organizational structure, and cultivated interdepartmental relationships.

CHAPTER 3

METHODOLOGY

Exploring various structural manifestations of Institutional Research for effectiveness is a tremendous task. Although formalized organizational structures are finite in their documented state, characterizing effectiveness would be incomplete using just quantitative measures alone, thus, the researcher undertook a broader approach for this study. The researcher chose to employ a qualitative, phenomenological approach to discover strong organizational structures for Institutional Research departments and their professionals that support and empower transformation. Merriam (2009) highlighted that a phenomenological approach affords the researcher the privilege of “focusing on the experience itself and how experiencing something is transformed into consciousness” (p. 24). Moreover, the transformation towards data-driven decision-making and institutional planning is a process rather than a static condition, thus making it difficult to quantitatively measure.

The approach used by the researcher allowed an investigation of the experience of transformation through various manifestations of Institutional Research departments in their everyday professional experiences (Merriam, 2009; Schram, 2003). The overall purpose of this phenomenological study was to discover and highlight strong organizational structures for Institutional Research departments and professionals that promote their effectiveness as transformational leaders who advance the strategic use of data in process augmentation and high-level collegiate decision-making. This study sought to discover how different structural configurations of IR support or hinder the cultivation of evidence-based decision-making and planning that result in institutional practices that value objective assessment and evaluation as

opposed to more subjective, assumed models for establishing their effectiveness with their potential students and communities.

The objective of this study was achieved through the exploration of a primary and several ancillary research questions. Primarily, what is the perceived relationship of organizational placement on Institutional Research professionals with departmental effectiveness, transformational leadership, and the institution’s culture of strategic, data-driven, evidence-based decision-making? The relative effectiveness of different IR configurations was qualitatively assessed through the conceptual lens of transformation towards evolved institutional maturity with respect to increased data-driven, evidence-based decision-making (Dresner, 2010; Seybert, 1991; Taylor et al., 2013). Furthermore, institutional maturity was codified based on the Performance Culture Maturity Model (Figure 1) as described by Dresner (2010), with particular emphasis on “alignment with mission...common trust in data [and] availability of currency of information” (p. 2).

	Alignment with Mission	Transparency and Accountability	Action on Insights	Conflict Resolution	Common Trust in Data	Availability and Currency of Information
Performance-Directed Culture Realized	Actionable and embraced mission —supported, informed, and reinforced by metrics	General transparency and accountability accepted as cultural tenets	“Closed loop” processes ensure timely, concerted action	Established and effective mechanisms for resolving conflicts	Data as truth: Common application of data, filters, rules, and semantics	Currency of metrics/data matches rhythm of business
Performance-Directed Culture Emerging	Actionable mission supported by “top- down” metrics	Limited transparency and accountability; multiple functions collaborate	Ad hoc (informal) action on insights across functions	When identified, conflicts resolved on an impromptu basis	Common data: Provincial views and semantics used to support specific positions	Enterprise availability, uneven currency of information
Departmental Optimization	Alignment with discrete functional goals, not enterprise mission	Fragmented transparency and accountability within discrete functions	Uncoordinated/ parochial action (sometimes at the expense of others)	Appearance of cooperation, “opportunistic reconciliation”	Conflicting, functional views of data cause confusion, disagreement	Availability and currency directed by departmental sources
Chaos Reigns	Mission not actionable, not communicated, and/or not understood	Arbitrary accountability, general opacity	Insights rarely leveraged	Conflicting, redundant, and competing efforts are the norm	Data and information generally unreliable and distrusted	Multiple, inconsistent data sources, conflicting semantics

Figure 1. Performance Culture Maturity Model. Copyright 2009, sourced from Dresner (2010)

Additional questions approached through this research included: What do the participants perceive as the benchmarks of effective strategic Institutional Research? What are some of the different structural placements for Institutional Research departments within the sample? How does the sample describe the benefits or opportunities that IR professionals face related to their particular structure? How does the sample describe the limitations or challenges that IR professionals face related to their particular structure? How does each participant's IR configuration support important relationships with stakeholders?

Since organizational structure is one of many variables that contribute to the effectiveness of Institutional Research departments, the aforementioned secondary questions were designed to flesh out confounding and complementary variables to the target of this study. This study sought to discover how different structural configurations of IR affected evidence-based decision-making and planning that resulted in institutional practices that value objective assessment and evaluation as opposed to more subjective, assumed models for establishing their effectiveness with their potential students and communities.

Setting

While it was important to explore a variety of configurations of Institutional Research departments to sufficiently characterize their relative effectiveness, it was equally as important that certain confounding variables be accommodated for and/or controlled against. Because institutions of higher education are categorically grouped by factors such as Carnegie classification, funding model, and award-granting level; it was important that the researcher design this study to purposefully showcase Institutional Research organizational placement as the focus. A single system of State Community Colleges served as the research setting for this study, chosen because it demonstrated significant variation in format and placement of IR

officers across each of its institutions. In addition to variations in professional title, the reporting structures also varied significantly leading to a broader array of documented organizational structures within demographically and geographically similar institutions.

The researcher is an Institutional Researcher within the participants' State system and accordingly omitted his home institution from the pool of sampled community colleges. The geography of the state system is widespread, but commutable, although the majority of data collection was conducted through virtual written and audio channels. Contextual documentation was easily accessible through the public State System website along with demographic information related to each participant's professional statistics. The majority of perceptual and non-written contextual information was gathered through member-checked phone interview transcriptions. The State System leadership was both open to and excited regarding the nature of this phenomenological study and its potential to illuminate structural strategies to advancing institutional and cultural maturity (Dresner, 2010; Seybert, 1991; Taylor et al., 2013).

Research Participants

The qualitative nature of this inquiry aligned well with a purposeful sampling strategy designed to include willing and appropriate stakeholders to various structures for Institutional Research professionals and departments. Because the study viability depended on exploring the differences between various IR structures, a scaled maximum variation methodology was employed for selecting research participants. Merriam (2009) highlighted that maximum variation sampling involves "identifying and seeking out those who represent the widest possible range of the characteristic of interest for the study" (p. 79). While the study included 8 individual participants from 4 institutions to compare, each purposefully and directly exhibited wide variation in IR departmental structure.

Research participants consisted of two primary subgroups within each institutional context. First, active institutional researchers were interviewed and researched formally focusing on variations in reporting structure and organizational placement. Second, direct supervisors and/or primary stakeholders to each IR professional/department were interviewed independent of the IR officer(s). The purpose was to control for interaction bias between IR professionals and their supervisors and/or stakeholders while gaining multiple perspectives and the effectiveness of IR structures at each site within the State System. Each participant's responses were labelled through the use of institutional and personal pseudonyms, allowing participant perspectives to be connected within each site while preserving the confidentiality of the participants and their institutions.

Data Collection & Analysis

Qualitative inquiry does not employ the singular variable control that hallmarks most scientific quantitative research. Because the nature of this study was more focused on assessing the experiential reality of different configurations for IR departments, it was important that steps be taken to limit possible avenues of misinterpretation through a planned redundant data collection strategy (Bloomberg & Volpe, 2012, p. 107). The use of multiple approaches to corroborate perceptions and strengthen meaning is called *triangulation* (Bloomberg & Volpe, 2011; Merriam, 2009). The researcher utilized strategic repetition to strengthen the rigor of the study rather than oversaturate the findings in unnecessary redundancy. The three primary methods that were employed to gather qualitative data on the effectiveness of IR professional/departments relative to organizational structure were qualitative surveys, semi-structured follow-up interviews, and document reviews specific to organizational structure and positional longevity.

The primary method of gathering demographic, contextual, and perceptual data from the participating Institutional Research professionals was the written survey. In addition to establishing each participant's professional status, some of the tool was based on the Performance Culture Maturity Model published by Dresner (2010). Reference to Dresner's model allowed stakeholders to select and characterize the level of their institution's "alignment with mission...common trust in data [and] availability of currency of information" (Dresner, 2010, p. 2). While this first level of research provided a descriptive overview of each participant's perspective on their institution's current status within the Performance Culture Maturity Model, the follow-up interviews provided a platform to flesh out the qualitative causation and social reality behind the current status presented in the survey instrument.

Once the primary data from the survey instrument had been collected and codified using Dresner's (2010) model of organizational maturity, the researcher conducted semi-structured interviews with each participant to gather more qualitative insight into the conditions and nature of the recorded perspectives. These interviews consisted of a mix of interpretative and probing questions as outlined by Merriam (2009). Interpretative questions were the primary format, since they were designed to "check on what [the researcher] thinks [they] are understanding, as well as offer an opportunity for yet more information, opinions, and feelings to be revealed" (Merriam, 2009, p. 98). Written responses alone would not have allowed the researcher to explore beneath the surface of each respondent's condition and reality with respect to their effectiveness and organizational placement. The primary goal of the interviews was to deepen the breadth of descriptive data yielded by each participant while also providing an opportunity for "the investigator to confirm [any] tentative interpretations" (Merriam, 2009) extrapolated through the primary research instrument. While not a formal member check, connecting the

primary research instrument to the follow up interviews was critical to supporting the validity and rigor of this work. The interviews themselves were recorded with the participant's permission, transcribed by the researcher, and subsequently member-checked by the participant for accuracy and comprehensiveness. While all 8 participants completed the survey instrument and were subject to a document review, only 7 were subject to subsequent interviews. The eighth participant became unavailable for an interview during the course of the data collection phase of this study. The researcher proceeded with the other two data sources for that participant.

While ideal probing purposeful questioning was used to catalyze descriptive conversations, leading questions were actively avoided to limit the inclusion of researcher assumptions and perceptual bias. Leading questions serve, either intentionally or inadvertently, to influence a respondent to confirming or accepting the researcher's point of view rather than describing their own unique perspectives (Bloomberg & Volpe, 2012; Merriam, 2009). The purpose of this inquiry was to explore and characterize the effectiveness of various configurations for Institutional Research departments, not confirm or refute a hypothesis that one layout is fundamentally superior to another. Participant confidentiality was maintained through the secured filing of raw data alongside pseudonym associations between individual participants and the institution(s) they represent.

Finally, respondent written data and interviews were codified based on significant emergent themes and the tenets of institutional/organizational maturity as outlined by Taylor et al. (2013) and Dresner (2010). Codified information was matched up with institutional documentation on organizational structure, the researcher's third data collection method, to connect perceived effectiveness with the structural position of the research participants. Finally,

data findings were shared with the respective participant(s) to strengthen credibility and dependability, both nourishing a higher transferability of the researcher's results to other Institutional Research applications outside of the target State System. Bloomberg & Volpe (2011) emphasized "transferability is not whether the study includes a representative sample" (p. 113) instead it is a quality that allows readers to transfer some the lesson's learned to their respective contexts. A small purposeful sample relies on member-checks to promote transferability as opposed to the large, random sampling necessary to statistically support the generalizability inherent to quantitative inquiry (Bloomberg & Volpe, 2012). As such active communication with participants through the data collection and analysis process was imperative to generating trustworthy findings.

Participant Rights and Protections

Although steps were taken to ensure the confidentiality and rights of individual and institutional participants, the researcher remained committed to transparency regarding the subject risks of participating in a qualitative inquiry. Participation in the study was completely voluntary and no action or attitude was applied or displayed against members of the target group who chose not to participate. Roberts (2010) highlighted "the principals of freedom and autonomy allow individuals to refuse to participate in the study or to withdraw at any time with no recriminations" (p. 33). To protect both the researcher and the participants, all willing participants were required to review and sign an Informed Consent form as displayed in Appendix A.

Informed consent is important, but not completely infallible. The small sample size associated with most purposeful samples in qualitative research makes aggregation of results independent of possible individual association challenging. Merriam (2009) emphasized "even

when the names are changed, some people are easily identified by the details of their messages” (p. 161). For this reason, it was imperative that all participants involved understood the transformational nature of this inquiry and the implications its findings may present to their immediate professional community. In addition to informed consent, all data collected was secured and locked in private primary and backup server locations. No data for this study was stored in an open domain without password protection accessible only by the researcher.

Perhaps most important was maintaining an open bridge of communication through the research process with all research participants. Ethically it is crucial that participants be able to ask questions and clarify any misinterpreted meanings behind their statements. This serves to both audit researcher bias in data interpretation as well as “ensure that no harm has occurred” (Merriam, 2009, p. 162) for the researcher or the participants.

Limitations

This study was specifically designed to gather and interpret information about the relative success of various organizational configurations for Institutional Research with a foreknowledge of and accommodation for any biases held by the principal researcher. Another reason for choosing qualitative inquiry as a research format was to avoid confirming or refuting any hypothesis about the role of IR structure and instead characterize the relationship between variables in a more descriptive fashion.

The goals and ambitions of institutions of higher education are driven by a number of factors including their classification, mission, and degree-granting level. As an example, for-profit, private institutions have different priorities and definitions of success for institutional researchers compared with non-profit, public institutions. To minimize the impact of varying demands and missions for institutional researchers, research participants for this research study

represented a purposeful sample of IR professionals from 2-year, public, non-profit community colleges. While this boundary did control for variations in institutional classification, it limited the transferability of this study to other institutional formats outside of the target niche.

However, qualitative inquiry is designed to explore a particular context with the ancillary possibility for some transferability rather than overt generalizability (Bloomberg & Volpe, 2012; Merriam, 2009).

Institutional Research departments within some large and well-funded institutions contain entire staffs of analysts and administrators. The more robust departmental structures often oversee student and academic research in addition to stewarding intelligence around institutional performance. While the target variable for this study was organizational placement regarding relative effectiveness in strategic initiative, size of the department and more robust resources in both human talent and quantity could have served as a confounding variable to this work. While larger departments are not universally connected with increased effectiveness or yield, the variations in operational capacity have a strong possibility of playing a role in the successful integration of institutional researchers into strategic development and action. Part of the codification process was to group members of this purposeful sample by department size thus acknowledging the role of that variation while maintaining a qualitative focus on the role of organizational placement.

Finally, unique political structures and variations in the degree of support from senior leadership (i.e. College Presidents and Deans) certainly serve as contributing factors to IR's inclusion at the decision-making table. Bolman and Deal (2008) stressed that while, "institutional researchers...can bring a much-needed analytical and architectural focus...it is also important to frame implementation from the perspective of building support where needed"

(p. 78). For this reason, the qualitative exploration of IR effectiveness related to penetration into strategic, institutional decision-making incorporated an assessment of the stakeholder buy-in and supportive relationship that have been cultivated by the research participants. Transformational leadership reaches beyond transactional accomplishments, meaning that strategic effectiveness hinges on a successful navigation of the political landscape. Recognizing and codifying long lasting, collaborative professional relationships served as a key indicator for the strategic effectiveness of institutional researchers within each participant's collegiate setting (Kirby & Floyd, 2016).

CHAPTER 4

RESULTS

This presentation of this study's results begins with an overview of the four subject institutions and the professional profile data gathered on each of the corresponding eight participants as identified by their study-specific pseudonym. Next, the results continue with an overview of several emergent themes uncovered through a matrix grouping of the survey data supported by quotations and responses to probing gathered in the semi-structured interviews. The themes emerged through the planned codification process focusing on actions and initiatives that are viewed as indicative of effective strategic Institutional Research and the relevant sections of Dresner's Performance Culture Maturity Model (Dresner, 2010).

As part of the data collection strategy the researcher successfully conducted a document review of each subject institution's organizational structure specific to the placement of their Institutional Researchers and/or IR departments. The researcher surveyed each individual participant using the Primary Qualitative Survey Instrument (Appendix C) developed specifically for this study, and their responses were member-checked for accuracy, integrity, and potential clarification. All but one of the eight research subjects participated in a private, one-on-one, semi-structured, qualitative phone interview with the researcher to afford an opportunity to probe into each participant's survey responses and provide another venue for additional clarification. In addition to fleshing out the lines of inquiry contained in the written survey, the interviews served as a venue for participants to discuss the three categories of the Performance Culture Maturity Model (Dresner, 2010) chosen as a framework for this study, specifically, *alignment with college mission*, *common trust in data*, and *availability and currency of information*. These addenda to the written survey provided the researcher with details and vocal cues that are not

often captured with a written data collection instrument. The triangulated data collection strategy undertaken by the researcher allowed the unexpected omission of the eighth interview to be absorbed by the other two data collection approaches and ultimately preserved the integrity of the project. All of the information combined created a rich pool of data from which the researcher assessed the emergent themes and extrapolated some of the potential implications specific to this study's purpose and objectives.

Institutional Overview and Participant Profiles

This section is designed to introduce the reader to each participant in this study along with their institute of origin. The information presented here is an amalgam of data gathered from the document review specific to each participant's structural placement within their respective institutions and their responses to the Primary Qualitative Survey Instrument (Appendix C). Pseudonyms are used at both the institutional and individual level to protect the identity of participants and the community college(s) they work for. Anonymity cannot be guaranteed given the scale and qualitative nature of this research project; however, the researcher took precautions through the reporting of results and subsequent analysis to preserve each participant's confidentiality.

The participants of this study hailed from one of four subject institutions from within the same public State Community College system. This review of the subject institutions begins with an overview of the demographic and classification information for each institution (i.e. Carnegie Classification of Institutions of Higher Education). Following the description of each institution, the researcher has detailed the relevant data gathered for each individual participant, including specific information related to organizational structure from both the document review and written surveys.

Danika Community College (DCC)

Gus Jacobson and Victor Williams represent the operational and supervisory Institutional Researchers from Danika Community College (DCC), respectively. The document review for Danika Community College revealed that DCC is a small, rural, public, two-year degree-granting institution with between 3,000 – 4,000 credit students enrolled each fall semester.

Gus Jacobson. “Gus” is the current Director of Institutional Research at Danika Community College (DCC). He has held his current position for five years and reports directly to the Dean of Planning and Public Affairs (Victor Williams). Gus’ boss, Victor, reports directly to the College President at DCC which means that Gus’ position at the college is two organizational steps from the senior leader of the institution. Gus reported in his written survey that he spends between 10-30% of his time working on strategic data initiatives outside of the mandated and pragmatic reporting that his position demands. Furthermore, Gus stated that this level of commitment to strategic initiatives represents a slight increase over the course of his tenure. Of the eight potential strategic actions and initiatives presented in the survey, Gus indicated that he views six of them as important indicators of strategic progress in Institutional Research, excluding participating in leadership meetings and stewarding the use of data to increase institutional effectiveness and efficiencies through process and procedure review. Gus also indicated that he is able to address all six of the actions he indicated as important in his survey response.

Victor Williams. “Victor” is the current Dean of Planning and Public Affairs at Danika Community College (DCC). He has held his current position for ten years and reports directly to the College President, which means that Victor’s position at the college is just one organizational step from the senior leader of the institution. Victor reported in his written survey that he spends

between 31-50% of his time working on strategic data initiatives outside of the mandated and pragmatic reporting that his position demands. Furthermore, Victor stated that this level of commitment to strategic initiatives represents a slight increase over the course of his tenure. Of the eight potential strategic actions and initiatives presented in the survey, Victor indicated that he views half (four) of them as important indicators of strategic progress in Institutional Research, excluding completing external reporting assignments, publishing reports to internal or external portals for stakeholder use, participating in leadership meetings, and attending conferences and professional development events. Victor also indicated that he is able to address three out of the four actions he indicated as important in his response, excluding promoting effective use of the institutional student information system (SIS).

Olympic Community College (OCC)

Doreen Carson and Adam Norton serve in analogous roles from Olympic Community College (OCC), respectively. The document review for Olympic Community College revealed that OCC is also a small, rural, public, two-year degree-granting institution with between 2,000 – 3,000 credit students enrolled each fall semester.

Doreen Carson. “Doreen” is the current Coordinator of Institutional Research and the Perkins Grant at Olympic Community College (OCC). She has held her current position for ten years and reports directly to the Dean of Enrollment Management and Institutional Research (Adam Norton). Doreen’s boss, Adam, reports directly to the College President at OCC which means that her position at the college is two organizational steps from the senior leader of the institution. Doreen reported in her written survey that she spends between 10-30% of her time working on strategic data initiatives outside of the mandated and pragmatic reporting that her position demands. Furthermore, Doreen stated that this level of commitment to strategic

initiatives represents a moderate increase over the course of her tenure. Of the eight potential strategic actions and initiatives presented in the survey, she indicated that she views six of them as important indicators of strategic progress in Institutional Research, excluding completing external reporting assignments and attending conferences and professional development events. Doreen also indicated that she is able to address all six of the actions she indicated as important in her response.

Adam Norton. “Adam” is the current Dean of Enrollment Management and Institutional Research at Olympic Community College (OCC). He has held his current position for ten years and reports directly to the College President, which means that Adam’s position at the college is one organizational step from the senior leader of the institution. Adam reported in his written survey that he spends between 31-50% of his time working on strategic data initiatives outside of the mandated and pragmatic reporting that his position demands. Furthermore, he stated that this level of commitment to strategic initiatives represents a moderate increase over the course of Adam’s tenure. Of the eight potential strategic actions and initiatives presented in the survey, he indicated that he views all of them as important indicators of strategic progress in Institutional Research. Finally, he indicated that he is able to address all eight actions, at least partially, in his current role at Olympic Community College.

Palermo Community College (PCC)

Ben Ackerman and James Henderson from Palermo Community College. Unlike the other participant institutions, Ben does not report directly to James who is the senior administrator in charge of Institutional Research. Palermo Community College is also a small, rural, public, two-year degree-granting institution with between 1,000 – 2,000 credit students enrolled each fall semester.

Ben Ackerman. “Ben” is a current Programmer/Analyst at Palermo Community College (PCC). He has held his current position for ten years and reports directly to the Dean of Technology and Facilities at PCC. Ben’s boss reports directly to the College President at PCC which means that his position at the college is two organizational steps from the senior leader of the institution. Ben reported in his written survey that he spends between very little (~0%) of his time working on strategic data initiatives outside of the mandated and pragmatic reporting that his position demands. Furthermore, Ben stated that this level of commitment to strategic initiatives represents a negligible (no) change over the course of his tenure at PCC. Of the eight potential strategic actions and initiatives presented in the survey, he indicated that he views four of them as important indicators of strategic progress in Institutional Research, excluding completing external reporting assignments, participating in leadership meetings, promoting effective use of the institutional SIS and serving as a gatekeeper to all institutional data from the SIS. Ben also indicated that he is able to address three out of the four of the actions he indicated as important in his response, excluding stewarding the use of data to increase institutional effectiveness and efficiencies through process and procedure review.

James Henderson. “James” is the current Dean of Students at Palermo Community College (PCC). He has held his current position for twenty-five years and reports directly to the College President, which means that James’ position at the college is one organizational step from the senior leader of the institution. James reported in his written survey that he spends between 10-30% of his time working on strategic data initiatives outside of the mandated and pragmatic reporting that his position demands. Furthermore, he stated that this level of commitment to strategic initiatives represents a moderate increase over the course of James’ tenure. Of the eight potential strategic actions and initiatives presented in the survey, he

indicated that he views all of them as important indicators of strategic progress in Institutional Research. Finally, he indicated that he is able to address all eight actions, at least partially, in his current role at Palermo Community College.

Pennell Community College (PECC)

Finally, the largest of the four subject institutions, Pennell Community College, provided Cheryl Landers and Sarah Paulson as study participants. Unlike the other three institutions, Pennell Community College is classified as a medium (not small), semi-urban (not rural), public, two-year degree-granting institution with between 6,000 – 8,000 credit students enrolled each fall semester,

Cheryl Landers. “Cheryl” is the current Planning and Research Assistant at Pennell Community College (PECC). She has held her current position for nine years and reports directly to the Dean of Enrollment and Student Success (Sarah Paulson). Cheryl’s boss, Sarah, reports directly to the College President at PECC which means that Cheryl’s position at the college is two organizational steps from the senior leader of the institution. Cheryl reported in her written survey that she spends between 10-30% of her time working on strategic data initiatives outside of the mandated and pragmatic reporting that her position demands. Furthermore, she stated that this level of commitment to strategic initiatives represents a moderate increase over the course of her tenure. Of the eight potential strategic actions and initiatives presented in the survey, she indicated that she views all of them as important indicators of strategic progress in Institutional Research. Cheryl also indicated that she is able to address all eight of the actions she indicated as important in her response at least partially.

Sarah Paulson. “Sarah” is the current Dean of Enrollment and Student Success at Pennell Community College (PECC). She has held her current position for four years, although

she held other positions prior to that, and reports directly to the College President. Sarah's current position places her one organizational step from the senior leader of the institution. Sarah reported in her written survey that she spends between 31-50% of her time working on strategic data initiatives outside of the mandated and pragmatic reporting that her position demands. Furthermore, she stated that this level of commitment to strategic initiatives represents a moderate increase over the course of Sarah's tenure. Of the eight potential strategic actions and initiatives presented in the survey, she indicated that she views seven of them as important indicators of strategic progress in Institutional Research, excluding *servicing as the gatekeeper to all institutional data from the SIS*. Finally, Sarah indicated that she is able to address six out of the seven actions she indicated in the survey, at least partially, in her current role at PECC, excluding *attending conferences and professional development events*.

Emergent Themes

The researcher identified four significant themes in the data that emerged from the qualitative survey results and were supported by the subsequent semi-structured interviews. Each of the following trends was identified through a qualitative codification of survey results, specifically, using matrices to sort and categorically group the data. The researcher then sifted through each participant's interview transcription to identify statements that supported or refuted the emergent theme.

Proximity to Central Leadership

Each participant was asked on their qualitative survey to indicate what portion of their time they were able to allocate to strategic initiatives outside of pragmatic or required data reporting. Qualitatively grouping the eight responses to this question adjacent to each participant's self-reported number of steps from the top (i.e. College President) illuminated a

correlation between higher percentages of strategic allocation and closer proximity to central leadership. Among the eight study participants, half report directly to their College President and the other half had one senior-level administrator between them and their institution's senior leader. Of those individuals who are not direct reports to their College President, three estimated that they spend 10-30% of their time on strategic initiatives outside of required and responsive reporting and one individual reported that he spent essentially no time (0%) working on strategic tasks, on average. Comparatively, of the four participants who are direct reports to the top of their organizations, three estimated that they spend 31-50% of their time on strategic initiatives outside of required and responsive reporting and one individual reported that he spent 10-30% of his time working on strategic tasks.

In addition to the qualitative data gathered in the primary survey, the semi-structured interviews illuminated awareness to this trend in many of the participants' verbal responses. Adam, who reports directly to the College President at Olympic Community College, stated "I think the real key...is that by reporting directly to the President there really is no layer or filter to the data analysis and the presentations I do". Adam also emphasized in his interview that his direct communication with his President adds gravitas to the work of Institutional Research, which serves to motivate institutional stakeholders regarding the importance of collaborating on data-driven initiatives and completing tasks related to strengthening the integrity of the data. Adam went on to emphasize, "I think if IR reported to an Academic Dean or Dean of Students it would be taken a little less seriously and wouldn't have the weight of the Office of President behind it", a statement that speaks not only to the importance of his position within his organizational landscape, but also to the relative disadvantage he predicts for analogous professionals who do not share a direct reporting line.

Victor, Dean of Planning and Public Affairs at Danika Community College (DCC), echoed many of Adam's thoughts, specifically stating, "I think where I have that seat at the leadership table it helps to bring those IR related matters right to that table, especially when we are talking about planning issues for the college". Even though Victor is not the primary IR professional at DCC, he recognized that it is his position in close proximity to the College President that allows the work of the Institutional Research office to gain the credence it needs to impact that strategic direction of the college.

Finally, Sarah, Dean of Enrollment and Student Success at Pennell Community College, stressed "I am fortunate to work directly with my President, because there is the potential for a College President to shape the data to the purpose of the day". Sarah hones in on the importance of a direct reporting line to help the President interpret the information in a light that is useful for the task at hand. In the absence of that aided interpretation, it is probable that some of the metrics that come out of Institutional Research could be misconstrued or mishandled leading to an emergent distrust in some of the information.

Much of Adam, Victor, and Sarah's responses to this line of inquiry echoed the importance of stewarding *institutional intelligence* (Terenzini, 2012) amongst those who are the institutional decision-makers. Specifically, Terenzini (2012) highlighted the critical importance of stewarding institutional intelligence as communicating the analytical meaning behind raw data relative to the objective(s) at hand. Terenzini (2012) recognized this phenomenon as an essential benchmark of successful strategic informational research. While a direct reporting line was an expected influence on the successful integration of strategic initiatives into the realm of Institutional Research, it also became apparent that there are other ways to support a healthy, strategic, data-integrative organization through the Institutional Research office. Beyond

reporting directly to a College President, this study's findings highlighted the importance of reporting to a supportive empowering supervisor at any level within an organization.

Supervisory Support

Whether reporting to a College President, a Dean, or other directing administrator; it is clear from the data that supervisory support is imperative to promoting the abilities of an institutional researcher along with the penetration of their findings into institutional decision-making. Similar to the findings of Johnston (2011), it is clear that reporting directly to the College President increases the visibility and gravitas of collegiate data, but for those who do not report directly to the top, it seems important that they have a conduit for disseminating their work to senior leadership. Cheryl, who has nearly a decade of experience working underneath various Deans at Pennell Community College, emphasized how much reporting to Sarah has empowered her work and allowed for her data to reach senior leadership more so than other previous managers. Cheryl stated "as a result of the person in the Dean's position, I would assert that the data I am coming up with now, compared to 5 years ago, is much more geared towards providing information to inform change for the college". Cheryl elaborated on this observation by highlighting that Sarah is a "mover and a shaker on the senior staff level" and that she is critical in pushing the importance of data and together they work to prevent analysis paralysis, as highlighted by Gagliardi & Wellman (2014) and Kirby & Floyd (2016).

Gus, the current Director of Institutional Research at Danika Community College, echoed many of Cheryl's sentiments regarding the importance of a supportive Dean as a manager. Gus emphasized "this particular Dean is a creative thinker and ...he listens and takes what I have to say seriously". Gus highlighted that being a Director gives him less direct access to the College President compared with a Dean-level position. He asserted that he is fortunate to have Victor as

a champion of data integration at Danika, stressing that “as a result [of Victor’s leadership] a lot of the decision-making around here is more data-driven, and I hear the term ‘show me the data’ a lot more.” Gus added that this increased trust and interest in data for institutional decision-making comes from many of the Deans and college leaders as a result of Victor’s seat at the leadership table and the value he has instilled in Gus’ work.

In contrast to Cheryl and Gus’ collective experience, Ben has seen the strategic inclusion of data hindered by reporting to a Dean who cannot currently prioritize a proactive emphasis on IR. Ben does not fault his current manager for this reality, but he did state “right now we are dealing with just the here and now...it is really a matter of just [satisfying] work orders for data requests”. One of the key differences between Ben and similar level study participants who have an empowered experience is that Ben reports to the Dean of Technology and Facilities, not the Senior-Dean or administrator in charge of institutional research, effectiveness, and success.

Ben indicated that a position closer to senior leadership would certainly help to increase the exposure of IR at Palermo Community College, but his current position has led to a deficit in his professional skills to advance his role. Ben confessed “I would need some more training; I am very limited on some skills and would need training in statistics to be able to help more with long-term strategic planning. Ben’s experience expands on the nature of successful organizational reporting for strategic Institutional Researchers, clarifying that reporting to a Dean can be empowering, but only if that individual has the opportunity and willingness to promote the importance of data integration at the leadership table. Whether an institution is experiencing a growth in the integration of strategic IR, like Cheryl and Gus, or a stagnation of the effect, like Ben; it does seem that the perception of any change is consistent cross-institutionally.

Consistency in Observed Change

Throughout much of the foundational research to this study there is an emphasis on the progression of the field of Institutional Research from an origin in pragmatic reporting towards more strategic and proactive work (Johnston, 2011; Polk-Conley and Squires, 2012; Ross & Swing, 2016; Terenzini, 2012). This study asked each participant to independently assess the observed change regarding this progression, positive or negative, with a focus placed on strategic work over the course of their tenure. While the individual responses varied, three out of four of the subject institutions showed agreement between their two respective respondents. Both participants from Danika Community College reported a slight increase in the emphasis placed on strategic IR compared with their origination at the institution. Similarly, the participants from Olympic and Pennell Community Colleges reported a moderate increase in the emphasis placed on strategic IR across the last 5-10 years. Palermo Community College was the only institution that did not display the above noted consistency regarding observed change. While James, Dean of Students, attested to a moderate increase, Ben claimed that his omission from the strategic integration of data has remained unchanged over the course of his 10-year tenure. However, it is worth noting that this study's research instruments uncovered a couple of unique aspects of Palermo Community College that could explain this incongruence when compared with the other subject institutions.

First, James has the longest tenure of all of the subject institutions at 25 years, which gives him a unique long-term perspective into any growth Palermo has experienced regarding the strategic use of data in decision-making. James testified that "credibility comes with time; you either earn it or you do not...the amount of time I have spent at the institution just lends to the importance of the things that I am working on". Beyond the credibility that James has earned he

labels himself a self-proclaimed “data hound” explaining that the use of data to inform decisions at the college is “no longer just a good idea, there is some reasoning behind doing certain things or not doing certain things”. Second, Ben noted earlier that he does not report to James, he reports to the Dean of Technology and Facilities. As a result, his position remains essentially isolated from the application of data as information in decision-making and is instead more utilitarian and tactical regarding the mining of data for James or other stakeholders on campus to utilize. Given this reality and the multiple responsibilities Ben must balance as a programmer and analyst, it is not surprising that he himself has not experienced the same growth as James. As Ben stated “the data gathering and report writing [at our college] has always been a part of the IT department, we do not really have an IR department on its own [and] I am able to suggest initiatives, but am not much of an agent for transformation currently”.

Longevity was a peripheral variable included in the data collection instruments of this study. While the survey data did not seek to illuminate a direct relationship between longevity and increased strategic inclusion, many of the study participants discussed it as playing a role in securing the buy-in and gravitas that the more strategic Institutional Researchers need to succeed. Adam asserted that his longevity at Olympic Community College is one of the things that helps keep some of the data skeptics at bay. He stated “sometimes there are skeptics among the audience that you are presenting [controversial data] to, and they do not believe the data, but because they trust my long term service to the college, they tend to not be quite as vocal about their distrust in the data”. Similarly, Sarah explained “I think the institutional knowledge provided by the tenure is invaluable...the knowledge of what the data trends are, where the data is, and the questions that have been asked over time are really [important]”.

Important Actions and Initiatives

The primary qualitative survey instrument presented each research participant with a list of eight potential strategic actions or initiatives highlighted through the literature review leading up to this work.

- Completing external reporting assignments (i.e. IPEDS, NEASC, NSC)
- Publishing reports to internal or external portals for stakeholder use
- Participating in leadership meetings
- Attending conferences and professional development events
- Promoting effective use of the institutional SIS (i.e. Jenzabar EX, Banner, PeopleSoft)
- Providing data to support current or past institutional actions
- Stewarding the use of data to increase institutional effectiveness and efficiencies through process and procedure review
- Serving as the gatekeeper to all institutional data from the SIS

Each participant selected the proposed actions or initiatives they felt were indicative of successful strategic Institutional Research. Additionally, each participant was asked to indicate whether they were able to address their selection partially, completely, or not all. While all of the action and initiatives listed were supported by the majority of study participants, only one of the proposed options was supported by all participants and only that one did every participant say they were able to consistently address, at least partially. *Providing data to support current or past institutional actions* stood out as the single most recognized indicator of strategic IR on all four subject college campuses.

In addition to indicating a unanimous approval of that initiative as critical to strategic Institutional Research, many of the participants highlighted its importance in their interview

responses. Adam of Olympic Community College emphasized, “I am constantly being asked by the President and by the Cabinet members for analyses of effectiveness of the different strategic initiatives”, suggesting that these requests compete for resources and time against other more pragmatic IR demands. However, Adam also indicated that leadership places greater emphasis on the completion of the strategic requests, indicating an appreciation and understanding for the importance of data in charting the course of institutional operations. Adam predicted that “down the road I totally expect that we will have a full time Director of IR that can help with the increase in strategic data requests”, and his prediction is based on the influence he has as a member of the President’s Cabinet. Not only did Adam’s insights substantiate the importance of “providing data to support current or past institutional actions” when assessing the strategic effectiveness of IR, they also reassert the importance of having connections between Institutional Researcher leaders and the senior leadership structure at colleges.

Similar to Adam, Victor at Danika Community College referenced the importance of providing data to support institutional actions by highlighting the Assessment Conferences that are regularly held at Danika. These internal conferences bring together a small group of cross-institutional stakeholders, including faculty and staff members, to examine current collegiate initiatives and assess their effectiveness and worth to the goals and mission of the organization. Victor spoke to the importance of data and Institutional Research officers in these conferences, not just for providing raw metrics, but for helping the conference members interpret and understand that meaning of the data presented. Specifically, Victor summarized that Institutional Researchers report to the conference members on “the data we looked at, the questions that were raised, the conclusions that were reached, the areas where further study is needed, and the [potential] short term and long term recommendations”. Victor’s experience and testimony

spoke not only to the importance of “providing data to support current or past institutional actions”, but also to the role of stewarding institutional intelligence (Terenzini, 2012) and helping to translate raw data into actionable and meaningful information.

Performance Cultural Maturity Model (Dresner, 2010)

The individual participant responses, as well as the grouped institutional responses, reveal some interesting insights into how the success of Institutional Researchers contributes to organizational maturity (Dresner, 2010). While each of the subject institutions had similar placement within the three selected categories of the model, *alignment with college mission*, *common trust in data*, and *availability and currency of information*, Danika Community College exhibited the highest level of Performance Cultural Maturity, nearing an Enterprise-level of transparency and accountability (Dresner, 2010). With regards to the model, Gus of Danika discussed the changes he has witnessed throughout his tenure at the college with specific reference to an increased trust in the data and a reliance on it as a guiding, rather than reactive, force in decision-making. Gus emphasized that “oftentimes, the research is what helps get the discussion going” rather than substantiating a preexisting supposition. This use of data as a catalyst for priming assessment rather than satisfying it speaks to the heart of realizing a mature and truly performance-based culture, as outlined by Dresner (2010) in this model. Victor echoed Gus’ sentiments by stating that data “is just always there [at the table] and understood to be important by the members of leadership”. The role of data as a conversation catalyst and its presence on the table through the decision-making and assessment processes at Danika Community College speak directly to this performance model’s vision of organizational and cultural maturity (Dresner, 2010).

Although the participating institutions placed relatively similarly on Dresner's (2010) model, Palermo Community College demonstrated a slightly lower cultural maturity than the other three. The document review and qualitative interviews indicated that Palermo is the only institution of the participating four to not have its operational institutional research person, Ben, reporting to the senior administrator charged with research and/or planning (James). Ben reports to the Dean of Technology and Facilities, and he described his role as much more transactional than any of the other operation-level study participants. "Being in the IT department and not part of an actual IR department in closer proximity to senior leadership is a hindrance" highlighted Ben. He also spoke of the misalignment that sometimes exists between what the data stakeholders ask for and what they really want or need. Ben testified that "sometimes you really have to pull it out of them you know...you can be doing work two and three times until we collectively land on something if you don't ask the right questions to help them understand the data". The misalignment that Ben highlighted regarding translating data to actionable information links cultural maturity (Dresner, 2010) with institutional intelligence (Terenzini, 2012). The data collected through this line of inquiry in this study reinforced the role of successful structure and support in cultivating an organizational climate that values data as an informing rather than confirming force. James confirmed much of Ben's perspective on the confirming nature of data at Palermo when he stated "I think we try to use data and make data-informed decisions, although I would not call all of the decisions data driven".

Summary of Results

The overall purpose of this study was to explore the role of organizational structure in promoting the effectiveness of Institutional Research departments as transformational leaders advancing the strategic use of data in process augmentation and collegiate decision-making.

Each of the eight participants and four institutions from within a single system of state community colleges were subject to three data collection techniques. The first, a document review, afforded the researcher an opportunity to gather information from published institutional resources that documented the organizational structure for each principal Institutional Researcher and their immediate supervisor. This information was incorporated into the participant profiles presented in this chapter along with much of the written data captured through the primary qualitative survey. The survey provided a platform for the third and final data collection tool, a series of semi-structured interviews. While all eight study participants consented to a document review and took part in the qualitative survey, Doreen from Olympic Community College was not able to commit to the final interview portion of the data collection process. Fortunately, the triangulated data collection strategy carried out by the researcher for this study was able to absorb this unexpected omission.

Beyond characterizing the structural placement and role of longevity for each participant, the data collected through this study illuminated several emergent themes connected with the relative effectiveness of each Institutional Researcher. First, *proximity to central leadership* emerged as a condition that revealed a higher degree of self-reported strategic inclusion for participants who had a direct reporting line to their institutions' chief administrative officer (i.e. College President). This theme aligns well with Johnson (2011) who emphasized the observed importance of having support from central leadership for IR professionals who are evolving into more strategic work. Second, it became clear through both the written survey results and interview dialogs that, in addition to Presidential support (Johnson, 2011), *supervisory support* played an important role for those operational IR professionals who do not hold a seat at the senior leadership table. A strong supervisor or manager who advocated for the importance of

Institutional Research and cultivated value in data for institutional decision-makers was perceived as an important factor among all the study participants, whether that support was viewed as present or not.

Third, the overall impressions about how each institution has grown, or not grown, to embrace more strategic Institutional Research demonstrated a *consistency in observed change* within each subject institution. Each institution provided this study with two participants, one operational IR professional and their immediate supervisor, and in each of the four pairings the perspective on their institution's progress towards a data-driven climate was well aligned. This alignment was more challenging to observe at Palermo Community College where the operational IR professional (Ben) did not report directly to the person in charge of IR at the leadership level, but instead to another senior level administrator. However, it was evident that despite their structural distance, their overall perception of the current state of IR was in relative accord. Forth, the participants agreed on several of the proposed *strategic important actions and initiatives* that are indicative of effective strategic Institutional Research. Across all eight participants there was one option that emerged as a universal factor in determining the strategic nature of their work. *Providing data to support current or past institutional actions* is a hallmark of effective IR work beyond responsive external and internal obligatory reporting. This core component of effective IR is supported by the findings of Calderon & Mathies (2013), who asserted the importance of Institutional Researchers as translators creating actionable information for raw data. Additionally, Goomas & Isabell (2015) similarly highlighted the transformational potential for IR as one that can drive effectiveness by supporting “the institution in ways that promote systemic improvements in student success” (p. 489).

Beyond these emergent themes, the Performance Cultural Maturity Model (Dresner, 2010) provided a framework upon which many of the perspectives documented throughout the participant data gathered in this study can be comparatively understood. The model cemented much of the data collected as existing somewhere along the continuum between compartmentalized, pragmatic IR and proactive, data-driven, strategic integration including Institutional Researchers as transformational forces on campus. Each of these emergent trends is essential to interpreting this study's findings, forecasting potential implications, and forming recommendations for action in the field as well as opportunities for future study and further understanding.

CHAPTER 5

CONCLUSION

The qualitative phenomenological study described throughout this dissertation stemmed from a realization that strategic Institutional Research is paramount to ensure the success of twenty-first century community colleges. Moreover, this realization is not being actualized to its full potential at some institutions (Ehrenberg, 2005; Johnston, 2011). While there are many potential variables discussed through the literature review, this study selected the positional and hierarchical placement of Institutional Researchers within their institution's organizational structure as the vantage point from which relative strategic inclusion was explored and assessed. While the qualitative lens for this study could not exclude possible contributing or confounding variables the way that a more quantitative approach would have, the researcher was able to characterize the role that many aspects of organizational placement play in the relative effectiveness of the study participants while accommodating other variables.

The study participants contributed data in the form of written and verbal feedback to a qualitative survey and semi-structured interview, respectively. Their perceptions were codified and subsequently grouped into several emergent themes which together helped to debunk some of the mystery behind what type of organizational placements and support structures provide an environment within which strategic Institutional Research has the potential to grow and flourish. This study concluded with several distinct actions that can help struggling institutions better promote effective strategic Institutional Research as well as illuminating several opportunities for future researchers to further the understanding of how to cultivate efficacy in the field.

Interpretation of Findings

Establishing the need for and value of this study was centered on answering the primary research question, *What is the perceived relationship of organizational placement on Institutional Research professionals with departmental effectiveness, transformational leadership, and the institution's culture of strategic, data-driven, evidence-based decision-making?* In order to better understand this relationship, the researcher explored the connections between the actions that each participant perceived as indicative of evolved and strategic Institutional Research and the position they hold at their institution. Once those actions were better understood, the researcher reviewed the structural and perceptual experiences of the participants as they related to their relative effectiveness.

Actions That Define Effective Institutional Research

Whether the participants felt they were included in significant effective strategic Institutional Research or not, this study helped highlight the activities that they viewed as indicative of it. Of particular note was the unanimous importance placed on *providing data to support current or past institutional actions*, which translated to cultivating a data-driven, institutional culture. This universally supported action demonstrated the connection between cultivating institutional intelligence and providing tangible, actionable information as opposed to merely satisfying pragmatic data and reporting requests. Just how much this is being done is an important qualitative indicator of how much each participant's institutional culture is migrating from an anecdotally-based culture towards one that uses data as a strategic driver rather than confirming addenda (Parmley, 2009). Adam Norton referenced this increased importance by affirming "we are trying to use data to make strategic decisions to impact student success", a statement that stresses the role of data in the formative, rather than the evaluative, states of

decision assessment. This connection between the participants' feedback and the work of previous researchers, such as Parmley (2009) and Terenzini (2012), substantiates the importance of evolving from a purely responsive model of providing data through IR towards a culture that brings data in throughout the formative as well as evaluative portions of planning and implementation.

There were several other actions and initiatives that study participants highlighted, each of which emerged in the results as constituting effective institutional research. *Publishing reports to internal and external portal for stakeholder use* was stressed by both Adam and Doreen of Olympic Community College as a means of providing access to data for decision-makers outside of direct interaction with field officers on campus. This increased bandwidth for gathering data creates more tangible opportunities to connect with data during the planning stages of institutional initiatives. Similarly, the use of technological tools to increase access to data by reducing the bottleneck on information flow was emphasized by several of the leading researchers whose work contributed to the foundation for this study (Seybert, 1991; Swing & Ross, 2016; Terenzini, 2012). Adam summarized “we [at Olympic] have infused data into all of the decision-making at the college to the point where we can no longer keep up with the demand for data”, which Supports other research espousing the need for alternative access strategies for data outside of the IR officers themselves (Ross & Swing, 2016; Terenzini, 2012). This study established that cultivating a robust means for accessing information is critical to supporting the advancement of Institutional Research and is a core indicator of effective structure.

Seven of the eight study participants highlighted *promoting the effective use of the institutional SIS* as an action indicative of successful Institutional Research. As discussed in Chapter 2, the origins of Institutional Research are grounded in collecting data, maintaining data

integrity, and reporting (Goomas & Isabell, 2015; Terenzini, 2012). Much like publishing reports serves as a way for stakeholders to access information, effectively using the institution's SIS creates active availability for the study participants as well as those who are seeking the data for initiatives. Cheryl emphasized this type of work as a core strategic initiative for Pennell Community College. Specifically, Cheryl and Sarah both highlighted that modern SIS software solutions are capable of so much more than many institutions use them for and advancing its use to promote effectiveness and efficiency is key to strategic Institutional Research. Victor also emphasized that increased use and reliance on the SIS has been instrumental in allowing his work to dig deeper into the meaning behind the raw data. These results implied that advocating for and empowering the use of SIS technologies is a critical component of effective Institutional Research. Not only does this practice remove some of the burden of routine data reporting from Institutional Researchers, it also empowers institutional leaders by giving them instant and remote access to data and the means to transcribe it from raw metrics to actionable information (Gagliardi & Wellman, 2014; Kirby & Floyd, 2016; Terenzini, 2012).

James from Palermo Community College highlighted the importance of using data early in process development and implementation by sighting its occasional absence. James stated “we try to use data and make data-informed decisions, although I would not call them data driven.” He went on to highlight how the college is putting more effort into evaluating college initiatives post-implementation, which is a promising practice that could lead to more proactive data-work at the college. This example shows how the partial inclusion of data, as confirming addenda, is a sign of progress towards more data inclusion and constitutes a movement towards effective institutional research. James summarized that “being able to say where we are doing well and where we are not doing so well is critical” even though it does not represent a

comprehensive use of data outside of post-implementation assessment (Dresner, 2010). What James described at Palermo Community College represented another strongly supported action which characterized effective strategic Institutional Research, more specifically, *stewarding the use of data to increase institutional effectiveness and efficiencies through process and procedure review*.

The degree to which data impacts the assessment institutional effectiveness and efficiency is an important indicator, not of the institutional perceptions associated with IR, but how those perceptions are actualized on campus. While it is important to cultivate a sense of value in Institutional Research through these important actions and initiatives, it is even more crucial to steward the application of these principals in routine institutional operations. Victor's description of his institution's "assessment conferences" which evaluate current collegiate practices and recommend actions to enhance effectiveness is a good example of how impactful strategic Institutional Research can be. Victor described his department's role in the assessment conferences as essential by asserting "we bring together the data that the people of the assessment conference need...we convene them, we are the scribes, and [we] put together the report of the assessment conference...complete with the short term and long term recommendations". While change is often met with a sense of reluctance to relinquish the comfort associated with familiarity, it can be eventually embraced through a collective examination of the data and information available. This transformation is at the very heart of effective institutional research, and its presence or absence in the field may be able to help leaders evaluate the health of actionable Institutional Research at their colleges.

Many of the participants discussed how their work has begun to produce data that confront some of the more traditional and anecdotal assumptions engrained in institutional

culture. This predicament presents a truly transformational opportunity, complete with a disorienting dilemma and an evolved world view (Knowles, 1990). The strategic effectiveness of an Institutional Researcher within their current structural and organizational climate can be qualitatively assessed through categorizing each participant's perceptions of their success stewarding this transformation.

Experiences Related to Structure

Providing a structure that supports either direct proximity to leadership or a direct reporting line emerged in this study as imperative to generating momentum in advancing the ability and potential of Institutional Research. James and Ben from Palermo Community College discussed the occasional reluctance they experience in bringing the data in early in both the decision-making and assessment processes. James emphasized that the college is “gaining much more traction” under their current leadership structure, but they are still mainly using data to evaluate existing practices rather than drive decision-making. Like many of the more senior participants, James is fortunate to have longevity as an asset outside of his structural position, but his experience serves as an important example of evolving versus evolved perspective on strategic Institutional Research. It is clear from his feedback and his colleague Ben's impressions that Palermo is less advanced in their strategic use of Institutional Research than some of the other subject colleges. Ben expressed an important perspective as he is more distant from the College President and thus has less direct interaction with the decision-making team than James. Ben stated, “right now [I am] dealing with just the here and now and...it is really a matter of just filling out a work order for data.” Ben's experience indicates an important connection between organizational placement and connection with the decision-making practices (Parmley 2009). Whereas Ben does not benefit from having a direct supervisor who champion's

the use of data at the leadership table, his time and level of technical experience are hindered, thus deleteriously affecting the use of proactive data at Palermo Community College. Ben's perspective on the strategic decision-making process does seem somewhat limited, but his longevity and position perspective on how data does and does not manifest itself in collegiate decision-making is enlightening. Interpreting the scenario at PCC illuminated the importance of a direct reporting line and managerial support for growth, particularly when it comes to expanding the abilities of a seasoned IR professional to meet the emerging demands of the field (Seybert, 1991; Swing & Ross, 2016; Terenzini, 2012).

Ben confirmed much of what James testified about the responsive nature of data reporting at the college when he speculated about the "faculty, staff and managers having *hunches* about things", and the data is usually used to either confirm or discount their assumptions. This observation fits well with what some of the preexisting literature concluded about the use of Institutional Research as confirming addenda to the change initiative process (Parmley, 2009). Also, the dogmatic change from a climate of anecdotal assumptions towards one of an evidence-based culture is a critical property that correlates with effective full-spectrum IR (Calderon & Mathies, 2013; Terenzini, 2012). Despite some of the current practices at his institution, Ben affirmed the importance of Institutional Research as a resource, even if it is mainly seen as a conformational role. Ben's outlook confirmed that a less direct reporting path limits full strategic inclusions, but having the peripheral support of James motivates him by allowing him to see the evolution of his campus climate over time.

Another important perspective in translating institutional data to institutional change that emerged as a results of this study is the ability and availability of potential action. Sarah described this as metering and prioritizing requests for informing or confirming data within

Institutional Research departments, specifically helping stakeholders “balance the desire to ask questions with the need to understand how the institution plans to use the answers.” What Sarah described echoes many of the tenets of *institutional intelligence* discussed by Terenzini (2012). She and Cheryl described the role of translating raw data into actionable information and avoiding analysis paralysis (Gagliardi & Wellman, 2014; Kirby, Y. K., & Floyd, N. D., 2016). This ability to meter and help colleagues assess the potential of raw data to navigate a pathway towards potential action and transformative change is a hallmark of successful strategic Institutional Research (Gagliardi & Wellman, 2014; Terenzini 2012). Sarah summarized “you can alter, not the data, but the conversation and change the perception of the results based on the type of question that you ask and how narrow or broad you make the data.” Another core tenet of successful institutional research and an effective organizational placement is the position’s ability to affect the way the college leadership is asking questions, and inform the way that data is being requested, not just what is being reported.

Implications

Although this study did not endeavor to explore all of the variables that contribute to the strategic effectiveness of modern Institutional Researchers, there were several structural factors illuminated by this research that may promote efficacy of Institutional Researchers. These factors have been organized into four emergent themes: proximity to central leadership, supervisory support, consistency in observed change, and important actions and initiatives. Even though these themes contribute in concert to the relative strategic success of the participants in this study, reviewing their implications individually is an important part of understanding how each factor contributes to success as highlighted in The Performance Cultural Maturity Model (Dresner, 2010).

Proximity to Central Leadership

One of the primary aspects of the structural positioning of Institutional Researchers that was examined in this study was each participant's reporting structure. One quality of that aspect is the participant's proximity to central leadership, in most cases, a College President. Field research has established that many configurations for Institutional Research offices employ a conduit for communication with and support from the College President (Chirikov, 2013). Johnson (2011) similarly asserted that he believed "support from the president [is] critical for the IR office" (p. 60). This study endeavored to characterize the importance and nature of that support structurally, and while this research has further established the benefit of a more direct connection with the College President, it also helped to establish that that benefit is the result of more than just proximity.

Sarah indicated that she "is fortunate to work directly [her] President, because there is the potential for a College President to shape the data to the purpose of the day" in fact she went on to clarify that her professional relationship with her President has helped to reestablish confidence in the data given "how the results change based on the populations that are included or excluded from the data". This reestablished confidence embodies one of the core components of transformational leadership. McCarley et al. (2016) highlighted the facilitative nature of transformational leadership in bringing about change, organizational improvement, and promoting effectiveness. By forging this relationship with her College President she has empowered the Institutional Research department to help the college leadership better understand the limitation and opportunities that exist within the database, increasing her President's understanding of institutional operations. Establishing this relationship as a conduit

for gathering information and subsequent interpretations has emerged in this study as a critical component of nurturing a data-driven and information rich collegiate culture.

Adam echoed much of the confidence in data that Sarah highlighted when he discussed the gravitas that being so organizationally close to the President's Office affords his work. Adam emphasized "there really is no layer or no filter to the data analysis and the presentations I do [and] it really is because it is technically coming from the President though my office and that does add a lot of impact". Adam and Sarah's experiences align with what Chirikov (2013) referred to as cultivating and sustaining knowledge networks through effective Institutional Research. These conduits for institutional knowledge and intelligence (Terenzini, 2012) serve to "develop long-lasting collaborative partnerships between IR and functional offices" (Kirby & Floyd, 2016, p. 51) which is critical to supporting an institution-wide strategic use of data.

Those who report directly to their College President described a platform that added viability and gravitas to Institutional Research initiatives in the face of other competing priorities. Conversely, those who were positioned more distant from their College President reported less time allocated to strategic initiatives outside of pragmatic and required reporting. Johnson (2011) surmised this connection when he highlighted the critical role that Presidential support has in empowering IR, and this study has elaborated on the effect that positional proximity has on the support. This study indicates that moving the operational and/or lead Institutional Researcher to a central service position adjacent to central leadership would likely serve to advance the strategic use of data.

Supervisory Support

Adjacent to proximity to central leadership is the need for supervisory support, whether a manager is the College President or other administrative leader. Such support comes in the form of direct empowerment as well as helping Institutional Researchers cultivate and nourish relationships with stakeholders across the organization, particularly those who are more skeptical of data-driven change (Chirikov, 2013). As Adam highlighted “there [may be] skeptics among the audience that you are presenting to, and they do not believe the data” and it is important that managers help IR professionals cultivate trusting relationships and secure skills that help debunk some of that initial opposition. Adam’s statement aligns with the perspectives of Northouse (2013) who emphasized that “transformational leadership is concerned with improving the *performance* of followers and developing followers to their fullest potential” (p. 191). In order for Institutional Researchers to be trusted and sought out as sources of institutional intelligence they must have the skills and expertise to inspire confidence (Terenzini, 2012). In addition, this study has added the importance of having managers who invest in their Institutional Researchers and advocate for their involvement.

The study shows managers who cultivate proficient and involved operational Institutional Researchers have seen the community-wide benefits of their investment. Cheryl spoke very positively about the support from her direct supervisor, Sarah, not just in advancing her position, but in advancing the use of data college-wide. Cheryl stated “as a result of the person in the Dean’s position, I would assert that the data I am coming up with now compared to 5 years ago is much more geared towards providing information to inform change for the college.” This evolution along the Performance Cultural Maturity Model (Dresner, 2010) substantiated the

power of strong and clear supervisory support. In order to be a transformational force within a culture working to embrace a new foundational dogma, Institutional Researchers must be supported and empowered to mobilize change. This observation and implication to the field of IR aligns well with (McCarley et al., 2016) and their assertion that transformational leaders distribute ownership of change affecting a stronger buy-in to the cultural shift that Institutional Research represents (p. 325).

In another example, Adam knows that much of “[faculty’s] distrust in the data is not a general distrust” but more of reaction when the data, and thus Institutional Researchers, are not “painting their program or project in a very good light”. He asserts that this reaction is often human nature, and the support that the College President has shown for his work has helped people to realize that “because we trust Adam we can trust the data”. The human nature Adam speaks of is at the core of Transformational leadership and transformative learning (Knowles, 1990), specifically, the process of reorienting the approach of those skeptical of data integration on college campuses. In order for campuses to evolve, worldviews and assumption of what success is must be challenged and rectified. This study has demonstrated that an effectively placed and supported Institutional Researcher can be advocates for and agent of transformational change. Institutional Researchers must be organizationally placed to be actionable while engendering the trust of stakeholder who can serve as allies in the process of transformation Kirby & Floyd (2016).

Consistency in Observed Change

Assessing successful placement for this study extended to noting the presence or absence of effective collaboration and communication between IR and peripheral departments as well as within IR’s organizational structure. Both Sarah and Cheryl ranked *common trust in data*

similarly high, stating the overall *data is seen as truth* at their institution (Dresner, 2010). They work collaboratively to advance to permeation of data and trust in informatics at their institution. Cheryl summarized “the Dean and I are working and clarifying to the nth degree exactly what is being requested before data sets are provided”. This practice demonstrates a collaborative investment in the departments and professionals they work with, helping stakeholders understand the breadth and responsible use of data. Calderon & Mathies (2013) asserted that successful Institutional Researchers promote a balance between data-poor assumptions and analysis paralysis, a core tenet of Sarah and Cheryl’s strategy that has helped them be successful. Terenzini (2012) stressed that “finding a balance between rigorous, thoughtful research and its practical and prudent application” is at the core of stewarding reasonable and actionable institutional intelligence (p. 147).

Strong communication was observed in this study as a core contributing factor behind consistency in observed change within Institutional Research departments and organizational reporting structures. The data demonstrates an overall accord in the perceptions of the two representatives from each subject institution. Each pair of participants viewed their institutions similarly when it came to the Performance Culture Maturity Model (Dresner, 2010), as well as the proposed strategic actions and initiatives. The combination of a strong reporting line, effective managerial support, and a clear vision for effective strategic Institutional Research led to a consistent message regarding the importance of data in high-level, institutional decision-making as evidenced by this study. As Chirikov (2013) summarized “IR productivity [and effectiveness] depend on the office’s position... and [the] responsibilities of Institutional Researchers; and their level of participation in the decision-making process” (p. 465).

Important Actions and Initiatives

There were several actions and initiatives proposed in the written qualitative survey as potentially contributing to the strategic success of Institutional Research. The action that rose to the top with its unanimous support was *providing data to support current or past institutional actions*. The two components to this action are crucial to determining the degree of success achieved or experienced by institutional researchers within their organizations. All of the study participants reported a measurable success in assessing and evaluating past actions, particularly if there was question as to whether or not to continue a previously approved process or initiative. However, not all of the participating institutions reported the significant use of data to support current or proposed initiatives. Transformational leadership is not founded on the ideas of evaluating completed initiatives, but rather to fundamentally change the status quo in the face of ineffective practices (Kirby & Floyd, 2016; McCarley et al., 2016).

The proposed actions and initiatives that many of the study participants indicated as characteristic of effective IR connect back to the importance of supporting institutional action with data in the formative, implementation, and evaluative phases. In order for any structural configuration of Institutional Research to be reviewed or assessed for its efficacy, the penetration of IR into every phase of institutional decision-making must be included. Throughout the literature review of this dissertation the researcher reviewed the properties that current research has labelled as contributing to the emergent success of strategic Institutional Research. Bolman & Deal, (2008) highlighted that IR “can bring a much-needed analytical and architectural focus on how campuses implement decisions. However, it is also important for Institutional Researchers to frame implementation from the perspective of building support where needed” (Bolman & Deal, 2008, p. 78). Just as many of the study participants stressed, the potential for

IR is vast, but the reality of where data can be actionable or not is the message that must be clear to nourish IR's integration (Polk-Conley and Squires, 2012; Ross & Swing, 2016; Terenzini, 2012). Sarah explained in her closing interview that she felt "the critical role of IR is to educate people on which data best show the needs that exist and the progress being made and to bring that information and focus to the conversations."

Performance Culture Maturity Model

Throughout the reporting of results and subsequent analysis of this study Dresner (2010) has been cited as an important indicator of transformative change. While the four subject institutions placed similarly in portions of the model selected for this work, Danika Community College demonstrated practices indicative of their higher placement, namely their assessment conferences. In these conferences the Institutional Researchers on campus serve an important role in stewarding the inclusion of data for the assessments that are being conducted cross-institutionally. The Institutional Researchers are promoting institutional intelligence and transparency at this highest levels of institutional operations (Dresner, 2010; Terenzini, 2012).

Conversely, Palermo Community College, which placed lower, indicated a more reactionary use of the data compared with the other three institutions. Palermo was the only institution that did not have its operational IR professional (Ben) reporting to the senior administration in charge of Institutional Effectiveness and Planning (James). It is clear that the institutions that placed higher on the Performance Cultural Maturity Model in this study are using data more strategically and holistically than the others. This study suggests that using a tool like Dresner's model may help colleges maintain regular benchmarking when it comes to charting and assessing progress for their Institutional Research departments along with their overall organizational migration towards an assessment based culture.

Recommendations for Action

Much of the current research documents variation in organizational placement of Institutional Research alongside the importance of interdepartmental relationships and cultivating trust (Hurst, Matier, & Sidle, 1998; Kirby & Floyd, 2016, Parmley, 2009; Terenzini, 2012). The data gathered throughout this study and the subsequent analysis reflected a similar dependence on structure and relationships alongside tenure, perspective, and skills. There is still no precise recipe that guarantees a structure for IR that will assure a migration towards data-driven decision-making. However, there are some actions that should be taken or structurally maintained to cultivate an institutional climate within which data integration can thrive through effective IR, such as:

1. Central Leadership. Institutions should endeavor to locate the IR functionality as close to central leadership as the structural scale of the institution or organization allows. Depending on the scale of the college this could be a Dean position who supports an IR professional or an upper level administrator who serves as the IR officer themselves. In three out of the four subject institutions, the perception of IR was one of strategic inclusion and importance with close and clear reporting lines to the College President. The fourth institution, where IR was not located on an organizational pathway that linked it to senior leadership, the perception of strategic inclusion was significantly less and IR operations were described as more transactional than contributing to strategic initiative and/or long-term planning.
2. Supervisory Support. Senior institutional leaders should ensure that their operational Institutional Researchers are empowered by managers that see the value in strategic and integrative data. While many of the functions of day-to-day Institutional Research center

on database management and fulfilling requests for internal and external data, it is important that those who oversee IR carve out time to bring operational Institutional Researchers into college-wide decision-making processes. The perspective demonstrated by Institutional Researcher's is unique in that the successful professional has "more than a cocktail party conversation-level grasp" (Terenzini, 2012, p. 142) of cross-institutional operations. An effective and collaborative manager will bring this wide-angle perspective into leadership conversation which allows decisions to be made with a broader and more objective perspective on the affected institutional constituents.

3. Technical Proficiency: Colleges should verify that their Institutional Researchers are in an organizational position where they can have access to routine professional development specific to information management and data manipulation skills. While not highlighted as a strictly structural element of successful Institutional Research, it is clear from the data gathered that successful IR professionals need to be in a position to obtain the training and professional development they need to optimize their time. Ben, who is the furthest removed from senior leadership and Dean-level IR support asserted "I am very limited on some skills and I would need training in statistics to be able to help more with long-term strategic planning" despite having been in his position for a decade or more. Conversely, Gus sighted how he combined his extensive SQL and Info Maker knowledge "to come up with scripts for all of the campuses regarding the [recent TAACCCT] project". His skills serve to advance the cultural maturity of the entire system, rising to profile of Institutional Research at Danika Community College and across the State system. Gus summarized that "in a way I am a DBA [and] I work with

many of the different departments” an exposure that couples his structural position and technical expertise with increased institution-wide visibility and value.

4. Internal Assessment of IR: Collegiate communities should employ and maintain a system to recruit regular feedback through assessment instruments, such as the Performance Cultural Maturity Model (Dresner, 2010), to review the perceived effectiveness of Institutional Research by both IR professionals and peripheral stakeholders. The researcher for this study selected three specific components of the Dresner (2010) model to qualitatively assess the perception of IR within each of the subject institutions, namely *alignment with college mission, common trust in data, and availability and currency of information*. An instrument such as this could be helpful in charting the perceived progression of IR from a pragmatic toward and strategic presence on college campuses. This could be performed both inside as well as outside of the immediate IR structure.

Recommendations for Further Study

Throughout this dissertation the researcher highlighted how organizational structure is a contributing factor to the overall strategic success of Institutional Researchers. As such, there are several areas of concentration that this study approaches that could be the subject of future work to further advance the field in understanding the qualities that foster a strong presence of data-driven action through effective IR.

1. Longevity. While duration of tenure was captured as part of this research and ranges from 4-25 years, this study did not endeavor to connect longevity as a separate variable to effective strategic Institutional Research. Many of the participants stated that their tenure had afforded them more trust and gravitas, but did not correlate that to effectiveness of colleagues with less experience, either in the field or at their

institution. There is an opportunity to expand on the role of longevity beyond a means for deepening trust, as a contributing factor to the strategic effectiveness of Institutional Researchers.

2. Cross Institutional Perception. This study focused on the internal perceptions of IR's effectiveness, but there is a definite opportunity to expand that vantage point. Using a model like the Performance Culture Maturity Model (Dresner, 2010) to institutionally assess *common trust in data* and *availability and currency of information* from outside of the Institutional Research office would deepen the understanding of IR's effectiveness in bringing data-driven thinking to the college community. If there are misalignments between the internal and external perspectives it could indicate the need for more communication regarding the availability of data and educational opportunities regarding the stewarding of institutional intelligence.
3. Institutional Size and Classification. In the future a researcher could conduct a study among institutions with different missions and resource pools to measure the relative effectiveness of IR as strategic stewards of data-driven decision-making and assessment. This study focused on small to medium-sized public 2-year degree-granting institutions from within a single State system of community colleges. The specificity of this study was purposeful allowing the research to focus on the role that organizational structure played in the relative strategic effectiveness of Institutional Researchers. Studying institutions with broader organizational landscapes and more resources could illuminate other important factors that support the effective placement and use of Institutional Research. Gus indicated the effect of limited resources on his effectiveness when he highlighted "probably the most obvious limitation is that there is

only me...I can only be spread so thin”, which indicated that more resources, particularly in trained human capital, could significantly expand the potential for IR at his institution.

Conclusion

This study was a small, phenomenological inquiry into the internal perspectives of what makes an Institutional Researcher successful as an agent of change specific to cultivating value in data-driven decision-making and assessment. The specific purpose to explore and examine the role of organizational structure for promoting the effectiveness of Institutional Research departments as transformational leaders advancing the strategic use of data in process augmentation and collegiate decision-making was met within the scope of this work. The data gathered from each of the eight participants from the four participating institutions provided valuable insight into the properties of organizational structure that support effective data integration and thus strategic Institutional Research. The triangulated data collection strategy allowed the researcher to gather baseline information about the documented structure and then to combine that with each participant’s written reflections and subsequent interactive verbal perspectives. All of this data was combined with the pre-existing literature and the data gathered here will serve to advance the understanding of how the structural realities of IR impact its strategic effectiveness. Rising to the top of the forces that empower strategic Institutional Research and data integration were close reporting proximity to senior leadership, a supportive supervisor (regardless of organizational positioning), clear communication resulting in consistency regarding observed change, and recognition of the actions and initiatives that are important to data-driven decision-making and an assessment-centered culture.

This study has contributed an increased understanding of the role of organizational structure in promoting the strategic use of IR while also illuminating further opportunities for additional study. Kirby & Floyd (2016) asserted that Institutional Researchers shoulder an enormous amount of responsibility to outside agencies, but also to internal stakeholders who are making more decisions based on the data and analyses that are being conducted rather than their own assumptions. As colleges move forward and compete for limited resources it is imperative that institutions use insights, like those gathered in this study, to structurally and culturally position Institutional Researchers to be as effective as possible.

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APPENDIX A – INVITATION TO VOLUNTARILY PARTICIPATE

Good Afternoon [POTENTIAL PARTICIPANT],

As you may know, I have been working on my doctorate degree at UNE since fall 2014. Since my first semester I have been interested in pursuing a final project connected with the fabulous work we all do as Institutional Researchers. Specifically, I have been interested in qualitatively studying variables that contribute to the strategic success of IR professionals beyond the mandatory external and internal reporting that we do. As Institutional Researchers we have unique access to institutional data and information as well as an adaptive perspective on enrollment trends and student success.

In summary, for my dissertation I would like to qualitatively explore the role that organizational structure has on the effectiveness of IR in a study entitled: “Empowering Transformation through Structure: Assessing Effectiveness of the Organizational Placement of Institutional Researchers”.

Because you are the Institutional Researcher on your campus, I would like to invite you to participate in my study. I can assure you that your identity as well as the specific identity of your institution will be shielded through pseudonyms and an emphasis on the analysis of aggregate trends. All raw data will be stored in a protected location and password protected for my eyes only. Additionally, I will verify any information I gather from you before it becomes part of my research analysis or dissertation materials. I have attached the UNE "Consent Document for Adults" to this message which outlines the specifics for my study.

I hope that you will consent to being a subject in my study. While I cannot offer you compensation, I can promise to share my aggregate findings with you in the hopes that it will help you and your institution understand some of the structural aspects to support the growth and integration of IR.

For now, you can simply respond to this message with a "YES" or a "NO" regarding your willingness to participate in my dissertation study. Please know that this is completely voluntary.

Thank you in advance and please let me know if you have any questions or concerns.

Have a nice weekend,

~Nick



Nicholas R. Gill, M.Ed.

Associate Dean of Institutional Research & Planning

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APPENDIX B – INFORMED CONSENT FORM



CONSENT FOR PARTICIPATION IN RESEARCH

Project Title: Empowering Transformation through Structure: Assessing Effectiveness of the Organizational Placement of Institutional Researchers

Principal Investigator(s):

Nicholas Gill, UNE Doctoral Student, ngill1@une.edu

PLEASE READ THIS FORM, you may also request that the form is read to you

Introduction:

The purpose of this form is to provide you with information about this research study, and if you choose to participate, document your decision. You are encouraged to ask any questions that you may have about this study, now, during or after the project is complete. You can take as much time as you need to decide whether or not you want to participate. Your participation is voluntary.

Why is this study being done?

This study is being conducted for the express purpose of characterizing structural configurations for Institutional Research professionals and departments that support evidence-based decision-making and transformational change towards the strategic integration of data into college-wide initiatives. There are no direct financial gains expected through the conducting or reporting of this study for the participant institutions, individual subjects, advisors, or researchers involved.

Who will be in this study?

- Individuals have been purposefully selected for this study based on their role as a lead Institutional Researcher or supervisor of an Institutional researcher within a public, 2-year, Associates degree-granting institution.
- You must be at least 18 years of age to participate.
- 8-10 Institutional Research professionals are expected to be involved in this research

What will I be asked to do?

- Data will be collected through three triangulated methods: documentation review, qualitative survey, and semi-structured interviews.
- Documentation Review: The organizational structure of the subject's institution specific to the reporting lines of the Institutional Researcher(s) will be gathered from published consumer information and institutional resources. Subjects will be asked to append or

confirm the information collected in the qualitative survey instrument that follows the initial documentation phase of data collection for the study.

- Qualitative Surveys: This instrument will be administered to confirm and append the demographic information and organizational structure specifics gathered during the initial documentation review. Additionally, a mix of interpretative and ideal position question will be posed to gather more qualitative information about the subject's experience of working within their given structure and climate.
- Semi-Structured Interviews: These conversations will be facilitated by the researcher and will be designed to confirm and expand on the feedback gathered during the qualitative surveys. Questions will be aimed at probing into specific topics raised by the interviewees without leading participants towards any expected responses. Any data found to be leading in the transcription of these interviews will be codified and bracketed aside from the data analysis.
- Subject Confidentiality: Survey results, interview recordings, and interview transcriptions will be referenced using pseudonyms that do not link to a specific individual or institution to protect the subjects and their institutions.
- Compensation: Monetary compensation for participation in this research will not be explicitly offered. Additionally, each participant will have the opportunity to review and amend their own data prior to analysis and have access to an electronic copy of the final study.

What are the possible risks of taking part in this study?

- In general, there are no foreseeable risks to study participants at the individual or institutional levels.
- Every effort will be made to secure identifiable information and any published data will either be presented in an aggregate format or through the use of pseudonyms. In the event of accidental exposure, the risks associated with this research are exceedingly minimal since much of the data related to the organizational structure is public domain.

What are the possible benefits of taking part in this study?

- The largest single advantage to taking part in the study is gaining a better understand of the variables that impact the subject's ability to mobilize evidence –based decision-making and data inclusion at their respective institutions. From the final report, they may be able to gain more insight into how their situation compares and contrasts with other participants (unidentifiable). This information could help the subject with reclassifying or amending their professional title and role and ultimately help further mobilize their career and their institution.

What will it cost me?

- There is no foreseen monetary cost for participation in this study. Total cost in time is estimated to be between 2-3 hours cumulatively.

How will my privacy be protected?

- Subject privacy and confidentiality is of the highest importance to the principal research of this study. All data will be recorded and stored using pseudonyms with a decoding legend accessible only by the principal researcher himself. Decoding is crucial to allowing the principal researcher to member check the codified data prior to analysis and finalization of the study.
- Information will be stored in password-protected and/or encrypted files
- Any data shared with the advisory team will not involve the decoding of pseudonyms for either the research participants or their respective institution.

How will my data be kept confidential?

- As indicated above, data collection and participation are confidential to individuals outside of the principal researcher.
- Please note that regulatory agencies and the Institutional Review Board may review the research records.

Copies of Informed Consent

- A copy of your signed consent form will be maintained by the principal investigator for at least 3 years after the project is complete before it is destroyed. The consent forms will be stored in a secure location that only members of the IRB and principal researcher will have access to and will not be affiliated with any data obtained during the project.
- The semi-structured interview recordings will be securely stored ONLY until transcription and respective member checks are complete. The transcribed interviews will be securely stored using pseudonyms with any individually and institutionally identifiable information substituted appropriately.

What are my rights as a research participant?

- Your participation is voluntary. Your decision to participate will have no impact on your current or future relations with your institution or your Community College System.
- You may skip or refuse to answer any question for any reason.
- If you choose not to participate there is no penalty to you and you will not lose any benefits that you are otherwise entitled to receive. You are free to withdraw from this research study at any time, for any reason. If you choose to withdraw from the research, there will be no penalty to you and you will not lose any benefits that you are otherwise entitled to receive.

- You may choose not to participate without any ill will or deleterious consequences in your professional or personal affiliation with the principal researcher, the University of New England, or the Community College System.

Whom may I contact with questions?

- The principal researcher conducting this study is **Nicholas Gill**, UNE Doctoral Student. For questions or more information concerning this research you may contact him at: nicholas.gill@ymail.com or (207) 232-4592.
- If you choose to participate in this research study and believe you may have suffered a research related injury, please contact **Marylin Newell, Ph.D.**, Lead Advisor at mnewell@une.edu or (207) 345-3100.
- If you have any questions or concerns about your rights as a research subject, you may call **Olgun Guvench, M.D. Ph.D.**, Chair of the UNE Institutional Review Board at irb@une.edu or (207) 221-4171.

Thank you in advance for your time and consideration of this research study. You will be sent a scanned or physical copy of this consent form.

End of Form Content

PARTICIPANT’S STATEMENT

I understand the above description of this research and the risks and benefits associated with my participation as a research subject. I agree to take part in the research and do so voluntarily.

Participant’s signature or
Legally authorized representative

Date

Printed name

RESEARCHER’S STATEMENT

The participant named above had sufficient time to consider the information, had an opportunity to ask questions, and voluntarily agreed to be in this study.

Researcher’s signature

Date

Printed name

APPENDIX C – PRIMARY QUALITATIVE SURVEY INSTRUMENT

Thank you for agreeing to participate and contribute to the success of my qualitative phenomenological study, "Empowering Transformation through Structure: Assessing Effectiveness of the Organizational Placement of Institutional Researchers". As an interviewee you are invited to respond to the following series of demographic and qualitative questions. Please be as thorough in any open-ended inquiries as you are comfortable, and remember that your identity will not be attached to any of the data you provide in the drafted or final analyses of this work. As a reminder, there will be a subsequent semi-structured interview designed to allow the researcher (me) to probe into some of your answers as well as provide an opportunity for you to add more to or augment your survey responses.

If you have any questions please do not hesitate to contact Nicholas Gill at nicholas.gill@ymail.com or (207)232-4592.

1. Please enter your full name (will not be referenced in the data or report)

2. Please enter your current professional title (i.e. Director of Institutional Research)

3. Please select your primary institution from the dropdown menu below (will be not be referenced in the data or report)

Participants selected which of the six system institutions they came from

4. Please enter the number of years you have held this position (even if the title has changed)

5. What is the title of the individual you report directly to? (i.e. Dean of Institutional Advancement, College President)

6. Please indicate the number of organizational steps it is from your position to the College President (i.e. Director of IR reports to the Dean of Students reports to the Executive VP reports to the College President; represents 3 organizational steps)

7. As an Institutional Researcher are you involved in strategic initiatives and decision-making at your college outside of required responsive data reporting (i.e. IPEDS, NEASC, The College Board)?

Yes / No / I am unsure

8. What percent of your time is allocated to strategic initiatives outside of required responsive reporting?

- a) 10%-30%
- b) 31%-50%
- c) 51-70%
- d) >70%

9. Does the percent of time you indicated in the previous question represent an increase or a decrease relative to when you started your position? Please use the slider to indicate the relative change.

Slider starting at “Significant Decrease” to “No Change” to “Significant Increase”

10. First, please indicate which of the following represent important indicators of successful strategic Institutional Research (which activities have the potential that mobilize change and promote evidence-based decision-making)

Second, please indicate which of the indicators you selected that you are able to address (at least partially) in your current position.

Potential Indicators	Important Strategic Indicator	Able to partially or completely address
Completing external reporting assignments (i.e. IPEDS, NEASC, NSC)	Yes / No	Yes / No
Publishing reports to internal or external portals for stakeholder use	Yes / No	Yes / No
Participating in leadership meetings	Yes / No	Yes / No
Attending conferences and professional development events	Yes / No	Yes / No
Promoting effective use of the institutional SIS (i.e. Jenzabar EX, Banner, PeopleSoft)	Yes / No	Yes / No
Providing data that supports current or past institutional actions	Yes / No	Yes / No

Stewarding the use of data to increase institutional effectiveness and efficiencies through process and procedure review	Yes / No	Yes / No
Serving as the gatekeeper to all institutional data from the SIS	Yes / No	Yes / No
Other (please specify)	Yes / No	Yes / No

11. Please indicate one answer per column based on your perception of your institution within this portion of Dresner's Performance Culture Maturity Model (Dresner, 2010)

Performance Culture Maturity Model (PCM)	Alignment with college mission	Common trust in data	Availability and currency of information
1	Mission is actionable, embraced; it is also informed and reinforced by data	Data is seen as truth	The availability and currency of data matches pace of the institution
2	Actionable mission supported by "top-down" data	Data is common when supported by provincial views	Data is available but not always current
3	Alignment with discrete functional goals	Data is conflicting, functional views cause data confusion	Availability and currency are controlled by departmental sources
4	Mission not actionable, communicated, or understood	Data is generally unavailable and/or widely distrusted	Multiple inconsistent data sources, conflicting metrics

12. What are the benefits or opportunities that you face related to your placement within the organizational structure of your institution?

APPENDIX D – SEMI-STRUCTURED QUALITATIVE INTERVIEW GUIDE

The specific questions asked during this interview will be contingent on the responses to the Primary survey. This interview will be semi-structured and designed to probe into areas of the survey responses that either researcher or participant feel need more development or content. This guide is designed to limit leading questions and facilitate the momentum of the interview/discussion without tying each participant to the same specific questions.

If you have any questions please do not hesitate to contact Nicholas Gill at nicholas.gill@ymail.com or (207)232-4592.

1. *(if needed)* As an Institutional Researcher please describe any strategic initiatives and decision-making initiative you are involved in at your college outside of required responsive data reporting (i.e. IPEDS, NEASC, The College Board)?
2. You indicated that you have been in your position as an Institutional Researcher for ____ years. How do you perceive your longevity as impacting your effectiveness as an agent of transformation?
3. You indicated that you report to the _____. How has reporting to that individual helped or hindered the ability for IR to transition from pragmatic reporting to more strategic work? How do you think a position in closer proximity to senior leadership might impact your effectiveness?
4. You indicated that ____ percent of your time is allocated to strategic initiatives outside of required responsive reporting. How do you think your structural position within the organization has impacted that?
5. You indicated that the following initiatives or activities represent important indicators of successful strategic Institutional Research _____. Can you elaborate on why you feel these are of particular importance?
6. Of those initiatives or activities, you stated that are able to address _____ (at least partially) in your current position. Can you expand on that ability?
7. You indicated the following through the chart of Dresner's Performance Culture Maturity Model (Dresner, 2010) _____. How do you think your position has helped to establish those levels?
8. Open inquiry regarding any of the limitations/challenges or benefits/opportunities the participant faces related to their placement within the organizational structure at their institution.