FOSTERING INSTRUCTOR BUY IN TO LOCAL BENCHMARK TESTING AND UTILIZATION OF BENCHMARK DATA TO DRIVE INSTRUCTION

A Doctoral Capstone Project

Submitted to the School of Graduate Studies and Research

Department of Education

In Partial Fulfillment of the
Requirements for the Degree of
Doctor of Education

Tracie S. Tomasko

California University of Pennsylvania

July 2021

California University of Pennsylvania School of Graduate Studies and Research Department of Education

We hereby approve the capstone of

Tracie S. Tomasko

Candidate for the Degree of Doctor of Education

7-20-21

Mary A. Wolf, Ed. D.

Assistant Professor

California University of Pennsylvania

Doctoral Capstone Faculty Committee Chair

7-20-21

John W. Zesiger, Ed. D,

Superintendent

Moshannon Valley School District

Doctoral Capstone External Committee Member

Dedication

This work is dedicated to my father, William Rhys Reese, who is dearly and deeply missed each day. My father instilled in me the values of commitment and hard work. It is my hope to guide and inspire those in my life and in my influence to devote themselves to what is valued in their lives and livelihoods.

Acknowledgements

I would like to express my appreciation to the educators within my small Central Pennsylvania school district. Thank you for volunteering your time to provide your perceptions, thoughts, and opinions regarding buy-in and testing practices. I would additionally like to thank the administrators in this and the surrounding area districts. Your insights to establishing buy-in and commitment and willingness to share your practices were inspiring. This research study would not have been possible without these educators and administrators.

I would like to express my appreciation to my faculty committee chair, Dr. Mary Wolf. Your calming encouragement, guidance, and assistance was essential and always appreciated throughout this Capstone experience.

To Professor William Denny, California University of Pennsylvania Librarian, and American Psychological Association authority, thank you. Your expertise and clarity made completion of this work a reality.

I would like to express my special appreciation to my external committee member, Dr. John W. Zesiger, whose inspiration, wisdom, guidance, patience, motivation, and unwavering support were indispensable in making my Doctorate imaginable. I will forever be thankful.

Finally, to my mother, thank you for being so excited for me. To my husband, daughters, Vanessa and Amy, and son-in-law, Diljot, I am eternally grateful for your patience and endurance of this endeavor as you sacrificed and relinquished family time in allowing me to devote myself to this venture and next step in my journey as a lifelong learner.

Table of Contents

Dedicationii
Acknowledgementsiv
List of Tablesxi
List of Figuresxi
Abstractxii
CHAPTER I. Introduction
Introduction
Background
Capstone Focus
Research Questions
Expected Outcomes
Fiscal Implications2
Summary5
CHAPTER II. Literature Review
Introduction
Current Research Literature
Fostering Instructor Buy-In
The Science of Building Buy In
Sound and Proven Strategies and Best Practices for Increasing Instructor Buy-In. 14
Building Instructor Academic Capacity
Building Relationships
Establishing a Growth Mindset20

Utilizing Buy-In Strategies with Authenticity	21
Validity of Local District Benchmark Testing in Core Subject Areas	23
Correlation of Student Success on Local Benchmark Testing	26
Instructor Perception of the Benefits of Benchmark Testing	28
Student Engagement and/or Commitment	30
Programmatic Change	31
Instructor Voice in Change	32
Instructors Understanding and/or Value of Data	34
Process of Learning How to Analyze/Apply Data	34
Summary	36
CHAPTER III. Methodology	38
Introduction	38
Purpose	38
Setting and Participants	40
Setting	40
Participants	43
Research Plan	46
Interventions	46
Fiscal Implications	48
Research Design, Methods, and Data Collection	49
Research Design	49
Data Collection	52
Date Collection Tools	54

Validity	57
Summary	58
CHAPTER IV. Data Analysis and Results	59
Introduction	59
Data Analysis	60
Action Research Study Results	64
Survey Results	64
Instructor Interview Results	71
Research Question One	71
Building Ownership	71
Fostering and Strengthening Trust	712
Creating Transparency	71
Data Based Decisions	71
Develop a Collective Lens	71
Identify Professional Learning to Inform Decisions	71
Research Question Two	75
Building Ownership	71
Fostering and Strengthening Trust	71
Creating Transparency	71
Data Based Decisions	71
Develop a Collective Lens	71
Identify Professional Learning to Inform Decisions	71
Research Question Three	79

Building Ownership	71
Fostering and Strengthening Trust	80
Creating Transparency	71
Data Based Decisions	82
Develop a Collective Lens	83
Identify Professional Learning to Inform Decisions	83
Educational Leader Interview Results	84
Research Question One	84
Building Ownership	84
Fostering and Strengthening Trust	85
Creating Transparency	85
Data Based Decisions	86
Develop a Collective Lens	87
Identify Professional Learning to Inform Decisions	87
Research Question Two	88
Building Ownership	88
Fostering and Strengthening Trust	89
Creating Transparency	89
Data Based Decisions	89
Develop a Collective Lens	90
Identify Professional Learning to Inform Decisions	90
Research Question Three	90
Ruilding Ownership	71

Fostering and Strengthening Trust	71
Creating Transparency	92
Data Based Decisions	92
Develop a Collective Lens	92
Identify Professional Learning to Inform Decisions	93
Discussion	94
Summary	96
CHAPTER V. Conclusions and Recommendations	98
Introduction	98
Conclusions	100
Research Question One Conclusions	104
Research Question Two Conclusions	104
Research Question Three Conclusions	106
Application for District Improvements	107
Fiscal Implications	108
Limitations	110
Sample Size	110
Measures Used to Collect Data	111
Longitudinal Effects	111
Recommendations for Future Research	112
Summary	113
References	115
Annendix A District Letter of Support	120

Appendix B. Informed Participant Consent: Instructors	121
Appendix C. Informed Participant Consent: Educational Leaders	123
Appendix D. California University of PA Institutional Review Board Approval	125
Appendix E. District Leader Interview	. 126
Appendix F. Likert Scale Instructor Survey	. 127
Appendix G. Instructor Interview	. 128

List of Tables

Table 1. District Demographics	41
Table 2. District Revenue	41
Table 3. Fiscal Implications	49
Table 4. Timeline for Study and Data Collection	52
Table 5. Data Collection Instruments	55
Table 6. Instructor Participants	61
Table 7. Elementary Instructor Demographics	61
Table 8. Junior High School Instructor Demographics	61
Table 9. Administrative Participants	62
Table 10. Results and Patterns of Instructor Survey	101
Table 11. Themes and Patterns of Instructor Perception Interview	102
Table 12. Themes and Patterns of Educational Leader Interview	103
Table 13. Fiscal Implications for District Improvements	110

List of Figures

Figure 1. Instructor Survey Questions One through Three	66
Figure 2. Instructor Survey Questions Five and Six	67
Figure 3. Instructor Survey Question Seven	68
Figure 4. Instructor Survey Question Four	69
Figure 5. Instructor Survey Question Eight and Nine	70
Figure 6. Instructor Survey Ouestion Ten	71

Abstract

As academic diversity and individual student needs in the classroom continue to increase, instructors must value or utilize local benchmark testing results to drive, alter, and facilitate successful instruction, student learning, and student growth in real time with immediate and constructive results. The purpose of this study was to explore building instructor buy-in to local benchmark testing, define the preexisting resistance to using benchmark testing to cultivate data driven instruction, and develop recommendations for programmatic changes to current practices. A qualitative method approach, with a small quantitative data component, using surveys and interviews and including classroom instructors and educational leaders, was used for this action research study. Analysis of data collected indicated buy-in to district initiatives requires the involvement of district stakeholders. Creating a 'want to' culture must be facilitated through establishing instructor ownership and trust through encouraging instructor contribution, creating teacher leadership, and nourishing educator responsibility. High-quality and on-going professional development is needed to develop value and understand the process and purpose of each initiative. Eliminating root causes or resistances to the use of benchmark testing must occur by increasing the value of the exam through professional development and time allotted to growing the instructors' knowledge of the testing and data analysis processes along with developing an understanding of aligning test results to curriculum standards and classroom lessons. Finally, student value of benchmark testing must be established through creating time for teacher-student conferencing with an emphasis of facilitating student-generated goals for individual growth, improvement, and success.

CHAPTER I

Introduction

As academic diversity and individual student needs in the classroom continue to increase, instructors must value or utilize local benchmark testing results to drive or alter classroom instruction. Benchmarking is defined as "something that serves as a standard by which others may be measured or judged" (Merriam-Webster Dictionary, 2020). In using benchmark assessments, instructors have the unique opportunity to facilitate successful instruction, student learning, and student growth in real time with immediate and constructive results.

For a school district to use benchmark assessments to their fullest capacity it would be necessary to determine approaches needed to build instructor buy-in, define preexisting resistance to using benchmark testing to cultivate data driven instruction, and develop recommendations for programmatic changes to current practices.

Background

An on-going problem in the school district where the action research was conducted involved instructors not utilizing all available tools to analyze taught materials, student learning, and/or student growth. Additionally, interim testing data was not being used to drive or alter instruction. Edmentum benchmark testing was used in grades three through eight to test the knowledge of students in alignment to the Pennsylvania Core Standard areas of English language arts and mathematics.

Edmentum benchmark testing was designed to "help support formative assessment practices in the classroom through targeted, standards-based practice and assessment solutions. High-quality data [could be used to] help educators identify student

knowledge where learning was breaking down throughout the school year" (Edmentum, 2017). Use of this available data would have allowed instructors to alter and provide flexible instruction meeting the needs of all student learners.

The testing itself was easily assigned to students and generated data was instantly available but rarely used by instructors to drive or differentiate instruction, build and manage small group lessons, or monitor student progress.

Action research was used to determine approaches needed to build instructor buyin, define the preexisting resistance to using benchmark testing to cultivate data driven
instruction, and develop recommendations for programmatic changes to current practices.

Additionally, the goal of the action research study was to build instructors' belief that

"fixed interim assessments could be a critical tool to help evaluate student progress
toward meeting grade-level state standards" (Edmentum, 2017).

Capstone Focus

The overall goal of the project was to determine what was holding instructors back from using benchmark testing to drive, alter, and improve instruction. Why were instructors not using data to formulate differentiation in the classroom? Why were many instructors never reviewing testing data to evaluate the success or needs of their instructional practices?

The preliminary goal of this action research was to develop a further understanding of building instructor buy-in to benchmark testing.

Research Questions

1. How do educational leaders foster and build instructor buy-in to improvement initiatives?

- 2. What are the root causes or resistances to valuing local benchmark testing and utilizing benchmark data to drive or alter classroom instruction?
- 3. What programmatic changes to local benchmark testing, data analysis, and review are necessary to increase the significance of these assessments and data driven instruction?

Expected Outcomes

Through administration developing buy-in to benchmark assessment and data analysis, instructors would begin to understand the value and impact this tool could have in their classroom. Literature review and interviews with local administration examining best practices to foster buy-in were explored.

Subsequent plans included surveying instructors looking for root causes or resistances to local testing processes. Understanding the perspective of the instructor would help develop instructor interview questions that would take a deeper look at what practices and/or procedures needed to change in order to have instructors understand the exams, testing process, and use of produced data to benefit their daily classroom instruction. Finally, in depth instructor interviews were conducted to fully understand instructor needs, concerns, or misinformation when it came to benchmark testing.

A successful action plan would produce programmatic changes including increasing instructor buy-in to benchmark testing, developing instructor understanding of the significance these test results may have, and prompt changes in using data to drive instruction.

Fiscal Implications

Direct costs to the district would be minimal and come in the form of securing use of electronic benchmark exams through the Edmentum Company, administration and instructor professional developments, securing day-to-day substitutes, and a book study. Speculation of the action research study hypothesized many instructors would blame the lack of benchmark data utilization on not having time to review and analyze data. Additional hypotheses included instructors having a need for professional development in understanding the testing platform used, knowing how to analyze and interpret the generated data, and fully understanding the relationship of tested materials to taught curriculum. A final hypothesis included a need for increased understanding on how to facilitate changes to instructional practices to bring about desired and improved student success.

Anticipants to building buy-in would include securing professional development by benchmark testing facilitator, Edmentum (for the purposes of this study), providing an in-depth look at the testing practices and procedures along with comprehending standards being tested, reviewing and developing an understanding of generated data, and cultivating the abilities to relate testing results to course curriculum.

A greater concern of using data to drive instruction was that of instructors not clearly understanding what was being taught in their subject area or simply said, instructor lack of content knowledge. Projections include instructors first participating in an in-depth book study focusing on learning targets followed by professional development opportunities where they, as learners, would guide the session through simulated lessons developed around the use of learning targets. The use of learning

targets in the classroom would help "create a culture of evidence-based, results-oriented practice, promote goal setting, and design a strong performance of understanding students' progress toward the learning target" (Moss & Brookhart, 2012). Pairing learning targets with benchmark testing would assist the instructor in becoming more familiar with their content area while focusing on data-driven, goal-oriented instruction.

The most important part of building buy-in, understanding teacher perspective, and creating value to a benchmark testing program would be providing opportunities for instructors to work alongside administration analyzing and understanding data, having a chance to ask questions to further their understanding, and reviewing on-going practices. Throughout the school year, teams of substitutes would be needed to allow opportunities for instructors to gather in a 'work session' setting reviewing data, discussing the correlation of results to classroom instruction, and planning for differentiation and meeting student needs.

Indirect costs would come in the form of time. It would be necessary for the district to embrace data analysis as a district initiative allotting ample time throughout the school year to focus on curriculum, testing procedures, proper review and analysis of resulting data, alignment to core standards, and most importantly instructor use and understanding of expectations and procedures.

Summary

Instructors' buy-in would be essential to first squelching the negativity towards benchmark testing; the negativity that was often reflected through the students and their efforts put forth during testing opportunities. Buy-in would develop a value for high quality data being made available to enhance learning in the classroom. The goal of

professional development and use of learning targets would help increase instructor content knowledge and drive improved instruction. As a result of this action research study, administrators and instructors would work collaboratively in designing programmatic changes to the use of benchmark testing and data analysis creating a positive impact on student learning and student growth.

CHAPTER II

Literature Review

The review of literature began by first defining and understanding the science of buy-in and discussing the need to initially recognize the negativity or opposition contrived by individuals believing 'buying-in' will lend to the loss of autonomy.

Methods, means, and approaches for fostering individual or organizational buy-in are discussed in regards to acquiescing to school and district changes and reform.

Comprehending the basis of using benchmark testing and data analysis to improve educational practices was explored with a review of educator perceptions of these exams and practices along with their effect on student success.

Relationships in supporting collaborative learning, building community, promoting instructor voice, and inspiring improved professional development practices are strongly endorsed as best practices for establishing educator buy-in.

Current Research Literature

Fostering Instructor Buy-In

Buy-in is defined as an "acceptance of and willingness to actively support and participate in something (such as a proposed new plan or policy)" (Merriam-Webster Dictionary, 2020). This definition includes the specification of pairing buy-in with the occurrence of a 'new plan or policy'. While researching buy-in of new plans or policies, many authors discussed the notion of reform.

Often the concept of reform can be met with negativity. Reform indicates that change is occurring in an effort to make improvements. Perhaps this is where negativity towards change may begin to develop or grow. Some may believe if they are being asked

to change or improve this indicates their current practice or process is being perceived as inaccurate or in the wrong. Cheng and Huang (2018) recommended focusing on educator buy-in before considering reform. "An alignment between teacher beliefs and the goals of a change or reform, as well as feelings of competence in implementation, teacher buy-in for reform plays a crucial role in times of change" (Cheng & Huang, 2018, p. 286). The rationale being, for organizations to establish buy-in they must first prepare educators for potential change, build an understanding of the needed change, and allow for educator input to prevent the perception of reform being foisted on the organization.

To counter negativity, Guarino et al. (2018), mathematic coordinators for the Orange County Department of Education, suggested respecting, trusting, and elavating teacher voice; "teacher ownership contributes to a successful rollout and stronger implementation" (Guarino et al., 2018, p. 34). These three items, respecting, trusting, and elavating teacher voice, or a form of these items were mentioned repeatedly by researchers as necessary actions when establishing buy-in. One must question if these traits should not become the norm for district culture verses being saved for rollout or implementation of change.

Guarino et al. (2018) went on to list the following *Guiding Principles* necessary for building ownership:

- Build teacher ownership instead of just buy-in.
- Foster and strengthen an unbreakable trust among all stakeholders.
- Create transparency and remain open to staff and public input and critique.
- Make decisions based on quantitative and qualitative data and evidence.

- Deepen teacher knowledge by developing a collective lens based on focus, coherence, and rigor.
- Make teacher learning visible to enhance collaboration, inform decisions, and identify professional learning to support implementation. (p. 33)

The Science of Building Buy In

Although each of the researched authors included in this review had developed unique lists, steps, and/or recommendations to increase buy-in, they do not harbor exclusive and independent ideas rather shared and similar themes.

Contributor to *Forbes*, covering topics of leadership and communications, Hedges (2015) recommended the following stages necessary in building buy-in to support reform.

Hedges' (2015) first stage of building buy-in is to formulate a coherent idea or vision but keep it in draft form. He recommends to first present the problem with the objective of convincing others there is a problem that must be addressed. The following stage consists of outlining reform measures and ideas as clearly as possible with "concrete examples to demonstrate how you came to your solution" (Hedges, 2015, Coherent Idea section). Outlining of reform should be followed with conveying concerns and expressing "where you think this idea may be risky or need some improvement, which will function as a lead-in for others to provide their input [thereby feeling welcomed into the conversation]" (Hedges, 2015, Coherent Idea section). He also recommends exposing the idea to outside criticism and acknowledge the criticism. He endorses taking interest in others' opinions and thoughts, asking questions looking for components of the plan that may be missing and acknowledge areas that can be made stronger. He promotes using productive advocacy.

The implicit message of this type of advocacy is this: I see the situation from a limited perspective... I don't think this is the only possible way of making sense of what is happening. So I want to share my observations, thoughts and interests with you, and get your reactions to them. Together we can create a more effective outcome than I would on my own. (Hedges, 2015, Coherent Idea section)

He then suggests transitioning from productive advocacy to productive inquiry:

This kind of inquiry is more than knowing what questions to ask and learning how to ask them skillfully. Productive inquiry is a method of engagement, a way to be present with yourself and with others. Attentiveness and genuine curiosity are your most important tools if you wish to inquire effectively - that, and the willingness to really listen to the other person. The ultimate goal here is mutual understanding. (Hedges, 2015, Coherent Idea section)

The remaining stages of building buy-in move to leveraging others' feedback for improvement to achieve your end goal. Continue acknowledging others' opinions now with the thought of using the provided feedback to improve the initial plan. "You can use their feedback to improve upon your initial idea and include them as players in the process". [The message to remember is to not force] "your idea; you are trying to work together for the benefit of the organization as a whole" (Hedges, 2015, Leverage Feedback section).

The final stage of Hedges buy-in plan is to communicate your progress. Keeping contributors to the idea process updated throughout change maintains the feeling of involvement. Hedges (2015) asked, "What would make them more comfortable with this solution? Most people tend to reject ideas out of fear, and particularly fear of the

unknown, so you may need to assuage that fear by showing what's possible" (Coherent Idea section).

As result of a university study designed to examine motivation of faculty participating in student learning outcomes, Sujitparapitaya (2014) maintained the following areas are essential when building buy-in and increasing the motivation and performance of faculty.

He recommended helping faculty members develop self-confidence in their student learning outcome assessment skills and knowledge by regularly understanding the concerns faculty members may have, the importance of "helping faculty develop self-confidence in their assessment skills, the training sessions, best practices, and other supporting materials need to be offered and easily accessed" (Sujitparapitaya, 2014, p. 9).

He went on to suggest removing unnecessary policies, procedures and existing barriers. Removal of "unnecessary, arbitrary institutional policy and procedural barriers" (Sujitparapitaya, 2014, p. 9) is noted as a key factor in reducing resistance to motivation, performance, and buy-in.

He suggested supporting the development of strong interest value by making a connection between performance goals and instructor individual interest and promoting an environment that supports personal importance value. "The connections between performance goal and individual's special abilities must be established by recognizing that they are 'good at this type of assignment' and this is their 'opportunity to show their skills and knowledge'" (Sujitparapitaya, 2014, p. 9).

Encouraging the establishment of utility value is the focus on ensuring instructors know the benefits of accomplishing the goal, and the final recommendation was to

develop incentive programs that support personal value. This careful selection of incentives involves administrators understanding the individuality of faculty members and their varying personal values.

Trombly (2014) recommended leaders transitioning from management approaches to the development of leadership approaches and stressed the importance of time when discussing reform. He felt many school reforms cannot be given sufficient time needed to produce expected results. He argued that reform for school districts now comes in the form of many initiatives occurring simultaneously. He found the eagerness of districts to take on and try to manage multiple initiatives "too often, their very undoing" (p. 43). He instead proposed the following thoughts on initiatives or organizational change:

Promote teachers' understanding of what the programs or approaches actually do or do not promise. Consult with and inform teachers of initiatives and change.

Promote all educators, administrators and teachers, working "ever more closely with one another around issues of improved instruction, constantly learning from and continually providing feedback to one another, until ongoing reflection upon and refinement of new instructional practices replace the systems' former patterns of behavior" (Trombly, 2014, p. 47). He also stressed the importance of making connections between reforms and the current system, and "approach reform efforts thoughtfully, not formulaically" (Trombly, 2014, p. 55).

Each of these authors and/or researchers recognized districts having layers and layers of additional mandates and requirements placed upon them through Departments of Education noting the simplicity in which leaders could delegate initiatives out to

departments or grade levels within the district. These researchers instead urged leaders to approach reform and multiple initiatives by first providing information and understandings of the reform, guiding instructors through a learning and implementation process, and providing continued support throughout project development and review.

Following a decade-long case study of nearly four hundred Chicago elementary schools, Bryk and Schneider (2003) noted the central role trust played in reform of changing productivity specific to academics. "Collective decision making with broad teacher buy-in, a crucial ingredient for reform, occurs more readily in schools with strong relational trust" (Bryk & Schneider, 2003, p. 43).

Bryk and Schneider (2003) listed the areas of respect, personal regard, competence in core role responsibilities, and personal integrity as areas that must become "personal obligations and expectations of others:"

- Respectful exchanges are marked by genuinely listening to what each person has to say and by taking these views into account in subsequent actions. Even when people disagree, individuals can still feel valued if others respect their opinions.

 (p. 41)
- Personal regard represents... the willingness of participants to extend themselves beyond the formal requirements of a job definition or a union contract.
- School community members also want their interactions with others to produce desired outcomes. This attainment depends, in large measure, on others' role competence. (p. 42)
- Perceptions about personal integrity also shape individuals' discernment that trust exists. The first question that we ask is whether we can trust others to keep

their word. Integrity also demands that a moral-ethical perspective guides one's work. (p. 42)

Sound and Proven Strategies and Best Practices of Administrative Leaders for Increasing Instructor Buy-In

One commonality of building buy-in was the noticeable volume of care, consideration, and attention administrators must take with groups of and individual instructors. Following a school climate survey and analysis of eight hundred seventy-four district employees, Contartesi (2010) mentioned leadership being key in developing a positive school climate. He went on to specifically note, "Superintendent leadership was significantly correlated with employee performance as well as school climate," and described the necessity for these leaders to be viewed as, "hardworking, collaborative, and honest" (Contartesi, 2010, p. 99). In the field of education one would assume this to be naturally occurring as leaders urge instructors to model what they expect to see from their students; it is evident educators feel the same when it comes to their leaders.

In correlation with Sujitparapitaya's (2014) thought of making a connection between performance goals and administration promoting an environment of support, Contartesi (2010) noted that instructor perception of administrators displaying those mentioned traits of being hardworking, collaborative, and honest led to instructors setting "personal and organizational goals supporting the school district's strategic direction" (p. 99).

Additional administrative qualities noted by Contartesi (2010) as supporting district climate and increasing employee performance were leaders creating an environment of trust, leaders who empowered instructors to contribute innovative ideas,

administrative communication specific to sharing ideas with stakeholders, and leaders who created a collaborative work environment.

Leaders focusing on developing supportive instructor learning environments in the areas of establishing learning communities and providing valuable professional development also ranked high on the list of strategies necessary to building instructor buy-in. "Teachers' discussion on the nature and purpose of education will help to articulate their values and visions about education reform" (Cheng & Huang, 2018, p. 286).

Professors Cheng and Huang (2018) discussed learning community, technologies, and innovation needed to promote a positive instructor outlook to change:

First, cultivate learning community. The ways in which teachers talk in and about education is an important resource with regard to their achievement of agency. A learning community could offer opportunities, social dialog, and time for teachers to make sense and become aware of their transformed work. (p. 286)

Secondly, social model with technology. Acquisition of knowledge and competencies through social modeling with communication technologies or pervasive mass media can raise participants' beliefs in their efficacy. (p. 287)

Thirdly, encourage innovation. Entrepreneurship refers to being innovative and [taking] necessary risks to bring about an effective educational change. (p. 287)

In Setwong and Prasertcharoensuk's (2013) work in the area of providing quality professional development to build buy-in and lead to effectiveness of instruction these researchers added to Cheng and Huang's thoughts finding administrators must also value teachers' professional learning by planning systematic teacher professional development,

promoting and supporting teachers in training and continuing education, and strengthening teachers' networks.

Wald and Castleberry (2000) agreed with Bryk and Schneider (2003) that change initiatives are now in such great number they are overwhelming the school and district systems. *Educators as Learners* was the cummulating project of a three year REALIGN process funded by the US Department of Education looking to build powerful learning communities. Wald and Castleberry (2000) felt districts struggled with multiple initiatives that were all looking for separate but equal time and answers to school improvement. Their belief was schools must have the ability for "continuous renewal" and focus on establishing this through a professional development model with a focus on schools as communities and collaborative learning.

Schools as Communities - "Members of the community are aligned around common goals, shared values, and an agreed-on way of being and doing. It is through this community of mind that synergy arises" (Wald & Castleberry, 2000, p. 4).

Collaborative Learning - This is "a process for simultaneously promoting individual and organizational capacity building. Collaborative learning assumes a shared focus, a shared responsibility to learn, and a disciplined approach to acquiring the desired goal. It demands that individuals shed the expert role and adopt a collaborative approach that recognizes the values, knowledge, and expertise of all community members. The collaborative learning process engages members of the community in a cycle of exploring, experimenting, and reflecting relative to a specific outcome" (Wald & Castleberry, 2000, p. 4).

The noted benefits of establishing schools as communities, building learning communities focusing on collaborative learning, and providing valuable professional development included and stressed building instructor academic capacity, building relationships, and establishing growth mindset among faculty.

Building Instructor Academic Capacity. Analysis of an in-depth interview study of instructors participating in middle school science professional development, Covay Minor et al. (2016) noted the role teacher content knowledge and pedagogical skills play in the success of implementation of many reforms. They additionally explored effectivenes of professional development through teacher's reflections of their own learning and suggested future professional development cannot continue to follow the 'one size fits all' model currently being used. They went on to state the knowledge individual instructors bring in to a professional development activity determines the knowledge, message, and strategies that are taken from the activity, which may not always amount to the learning experience or expectations of the district. "We need to think more about how the professional development interacts with teachers' previous knowledge and experiences. [Emphasizing that] designing professional development that is calibrated to teachers' needs and prior knowledge holds great promise for increasing the payoff for professional development" (Covay Minor et at., 2016, p. 22). This merely aligns to the idea of differentiating to meet the needs of learners. Expert level learners become easily bored if professional development is focused on material and practices they have already mastered, while entry-level instructors may be overwhelmed if professional development makes assumptions that all have general levels of content understanding.

Similarily, Guarino et al. (2018) mentioned the importance of including all stakeholders in the process of professional learning mentioning "increasing capacity would mean leveling a perceived hierarchical structure so that staff at all levels felt comfortable participating." [The professional learning included] "both alignment of curriculum and instructional practices" which valued "transparency, teacher agency, participatory decision making, and professional learning" (Guarino et al., 2018, p. 31).

Wald and Castleberry (2000) suggested districts assume the traditional inservicing approach of large group gatherings, planned by the district, and led by experts will promote effective learning, but argue the use of this traditional in-servicing model in the current era of increasing demands in education "is becoming more and more questionable." They shared recent research noting a greater need for "teacher inquiry, action research, professional collaboration, and learning communities to help educators meet these rising expectations" (p. 8). They additionally supported "learning driven by the learner, experimental in nature, and fueled by rich, diverse, accessible sources of information contending these needs can be met through professional development and within learning communities using the following practices and approaches (p. 8).

Inquiry into 'the assumptions and beliefs that create the problem' is an essential element of the generative learning ("out-of-the-box" learning) approach to thinking and greatly enhances professional development. Desire to learn must start within the learner. "Motivation to learn begins inside oneself with a need or a question. Learning emerges from an intrinsic desire to know" (Wald & Castleberry, 2000, p. 11).

Building Relationships. Based on a literature review focusing on collegiality among educators, Shah (2012) explained:

Collegiality, (the cooperative relationships of colleagues), is seen as a key aspect of teacher professional development and a vehicle to increase teacher knowledge. The qualities and characteristics appearing within the labels of teacher individualism, isolation, and privitism are widely perceived as threats or barriers to teacher professional growth and development. He also suggested that collegiality among staff leads to teacher satisfaction and adaptability, provides more systematic assistance to beginning teachers, helps teachers cope with uncertainty and complexity, responds effectively to rapid changes, and creates a climate that values risk taking and continuous improvement. (p. 1423)

In reflecting upon his career spent working in schools, Barth (2006) concured with Shah stating "the nature of relationships among the adults within a school has a greater influence on the character and quality of that school and on student accomplishment than anything else" (p. 8). He added the indicator of student and teacher relationships is based on the relationship administration has with teachers. He observed when administrator-teacher relationships are trusting, generous, helpful, and cooperative, the same can be said for relationships between students and teachers. Barth (2006) asserted educators talking with one another about practice, sharing their craft knowledge, observing one another while they are engaged in practice, and rooting for one another's success as actions that contribute to student success, increased instructor knowledge, and valuable relationships, collegiality, among colleagues.

One must caution that working collaboratively within peer groups does not evolve as a natural process or practice to educators. Collaboration and learning communities

must too be viewed as a new initiative and must be given equal attention in regards to providing educators professional development and continuing education.

Establishing a Growth Mindset. Do teachers feel they are losing when they are asked to embrace new curriculum, new incentives, and new ways? Dweck (2016) explained that individuals with growth mindset are "ready to take risks, confront challenges, and keep working at them" (p. 9). She went on to say, "Those with a fixed mindset feel "risk and effort are two things that might reveal your inadequacies and show that you were not up to the task" (Dweck, 2016, p. 9).

One must remember and make a connection to the earlier discussed potential of negativity to reform. It is important to recall that reform indicates that something is being changed in an effort to make improvements. Additionally, the thought that some may feel in being asked to change or improve they believe or see their current practice or process as inaccurate or in the wrong may indicate these individuals share a fixed mindset or fear of revealing inadequacies or inabilities to perform a new task.

After conducting research exposing students to growth mindset activities, Woods (2020) agreed with Dweck acknowledging, "People in the fixed mindset feel they are constantly being evaluated - are they smart or dumb, will they succeed or fail, and will they win or lose?" He stated, "A challenge is seen as a test where they must succeed or fail. They focus on the judgment and may ignore feedback about how to improve their performance. If they do not succeed in their first effort, they may give up." He went on to note, "With growth mindset, people are not interested in proving themselves, but rather improving themselves" (Woods, 2020, p. 5).

Dweck (2016) asked the following questions resulting in these findings in regards to success when comparing growth and fixed mindsets.

What is Success? Finding #1 Those with growth mindset found success in doing their best, in learning, and improving (p. 98). For those with fixed mindset, success is about establishing superiority.

What is Failure? Finding #2 Those with growth mindset found setbacks motivating (p. 99). In the fixed mindset, setbacks label you.

Taking Charge of Success Finding #3 People with the growth mindset (in sports) took charge of the processes that bring success - and that maintain it (p. 101). In the fixed mindset, you don't take control of your abilities and motivation. You look for your talent to carry you through.

Returning to Contartesi's (2010) notion of leaders creating an environment of trust helping to build support for district climate, increasing employee performance, and thus establishing buy-in, Dweck (2016) revealed employees that have a high level of trust and sense of empowerment, ownership, and commitment are more likely to have a growth-mindset organization. These individuals felt supported in "risk-taking, innovation, and creativity" (p. 143).

Utilizing Buy-In Strategies with Authenticity

In a study of one hundred twenty-seven school administrators and one hundred twenty-seven teachers questioned about leadership styles and teacher effectiveness regarding building buy-in through authentic leadership, Sirisookslip et al. (2015) noted two types of needed leadership: supportive and participatory.

Supportive leadership is utilized in encouraging teachers in their work and

supporting their personal life and is evidenced by leaders creating a positive climate treating followers fairly, respectfully, and democratically while showing mercy, kindness, and understanding teachers' feelings. To promote participative leadership, Sirisookslip et al. (2015) referenced administrators including teachers in the decision making process and listening to the opinions of teachers.

Angelle's (2017) work, research focusing on authentic leadership by way of an individual leadership story, found "the heart of authentic leadership is the true nature of the leader, one which is moral and just, therefore, worthy of trust from the followers" (p. 25). She included *awareness*, self-knowledge of feelings, *behavior*, the thought process of connecting value, feelings, and perceptions, and *relationships*, leading through modeling values as three components of authentic leadership.

The writings of Lovelace (2019) discussed the benefit of districts' use of a teacher leader approach to stimulate an authentic positive school culture observing classroom teachers "had good supports when there was a change to the school culture from teacher leaders [and] expressed positive outlooks about their school culture and job outlook" (pp. 105-106). Additionally noted, teacher leaders were able to encourage or involve classroom teachers in school activities, participating in school communities, and engaging with one and other.

Building instructor buy-in to summative testing has become a shared initiative of school districts and learning facilities across the nation. The use of benchmark assessments exemplifies acceptance of and willingness to actively support and participate in something to maintain, drive, alter, and essentially change classroom

instruction and practices aimed at meeting student needs with the crucial goal of promoting student success.

Validity of Local District Benchmark Testing in Core Subject Areas

"Committing to quality means setting clear goals for student achievement, regularly measuring performance against those goals, reporting evidence of success, and continuously working to improve results" (Sujitparapitaya, 2014, p. 8). To clarify, "Benchmark assessments are assessments administered periodically throughout the school year, at specified times during a curriculum sequence, to evaluate students' knowledge and skills relative to an explicit set of longer-term learning goals."

Additionally, "The design and choice of benchmark assessments is driven by the purpose, intended users, and uses of the instruments. Benchmark assessment can inform policy, instructional planning, and decision-making at the classroom, school and/or district levels" (Herman et al., 2010, p.1). The research completed by this group, published in an *Assessment and Accountability Comprehensive Center Policy Brief*, expanded the above thoughts in stating "benchmark assessments often serve four interrelated but distinct purposes":

Communicate expectations for learning. Benchmark assessments communicate a strong message to students, teachers, and parents about what knowledge and which skills are important to learn. (p. 3)

Plan curriculum and instruction. Benchmark assessments can serve curriculum and instructional planning purposes by providing educators information needed to adjust curriculum and instruction to meet student learning needs. To do so, benchmark assessments must be aligned with content standards and major

learning goals and provide reliable information on students' strengths and weaknesses relative those goals. (p. 3)

Monitor and evaluate instructional and/or program effectiveness. Benchmark assessments can also be used for monitoring and evaluation purposes, by providing information to teachers, schools, or districts about how well programs, curriculum, or other resources are helping students achieve learning goals. Benchmark assessments can help administrators or educators make mid-course corrections if data reveal patterns of insufficient performance, and may highlight areas where a curriculum should be refined or supplemented. Special care, however, must be taken in using benchmark assessment to monitor or evaluate student progress. Most benchmark assessments are designed to measure what students have learned during the previous period of instruction and do not provide an indicator of progress. Simply comparing students' scores from one time point to the other does not tell you whether student performance is improving, unless the tests are specially designed to do so. (p. 3)

Predict future performance. Benchmark assessment can provide data to predict whether students, classes, schools and districts are on course to meet specific year-end goal or commonly, be classified as proficient on the end-of-year state test. (p. 4)

Popham (2017) suggested the validity of these tests additionally include both time honored and more current expectations of stakeholders understanding the rationale for testing. The decades-old rationale for instructor understanding of testing is "directly related to helping the teacher make a decision" (p. 17) and includes the ability to

determine students' current status, monitoring students' progress, assigning grades, and determining one's own istructional effectiveness. He adds the more current motivation for instructor understanding of testing is linked more directly to shaping 'public perceptions' of educational effectiveness at both the local and state levels and includes influencing public perceptions of educational effectiveness, helping evaluate teachers' teaching skill, and clarifying teachers' instructional intentions. He noted that in today's schools both the old and new rationale for instructors understanding of testing works together to assist in decision making at various levels.

One must acknowledge, for good or bad, the use of today's summative testing from the educator's point of view collectively determines student status, monitors student progress, is used to assign grades, and does determine instructor effectiveness.

Unfortunately from the public's limited point of view, the use of summative testing to determine school standing does influences the perception of the establishment's and educators' effectiveness.

In an effort to align benchmark testing with goals for student learning and establish the purpose of these assessements, Herman et al. (2010) suggested "that policymakers answer the following questions prior to adopting or developing benchmark assessments for their school or district" (p. 2):

- What purposes do you expect benchmark assessments to serve?
- What criteria should you use to select or create benchmark assessments?
- What organizational capacity is needed to successfully support a benchmark assessment program?

Earlier research of Baker and Herman (2005), which focused on Assessment to Promote Learning, specified the following measures needed for the validity of benchmark testing to provide accurate information on student progress. There must be initial measures to align testing with standards ensuring what content is to be assessed. Rigor of the assessment must be enriched through use of extended-response items to evaluate student thought process. Fair testing for all students must be ensured. Data included must confirm the test's technical quality. Results should be user-friendly, information must be provided to assist in result interpretation, and utilization of benchmark testing and results must meet its designed purposes.

Herman et al. (2010) expanded on the previous list emphasizing additional criteria necessary when selecting or developing benchmark assessments. They spoke of *validity*, does the test measure what it is designed to measure, *alignment*, does the test measure what the school is teaching and wanting to assess, *reliability*, is the test consistent in its target and are scores accurate and error-free, *fairness and bias*, does the test allow for all students to show what they know and is free of stereotypes, and *high utility*, does the test help the district accomplish their purpose for testing?

Correlation of Student Success on Local Benchmark Testing and Overall Student Academic Success

"It is critical to identify with as much precision as possible how assessment information is to be used, and to validate the assessments for those uses" (Niemi et at., 2007, p. 3). Using National Center for Research on Evaluation, Standards, and Student Testing report materials to focus on assessment development and increasing the predictive ability for students' performance, Niemi et al. (2007) additionally mentioned,

"If the benchmark tests are explicitly designed to correlate highly with the state tests, this will mean that the district is committed to using a state-test-like measure to evaluate schools, student performance and overall system accountability" (p. 4).

Niemi et al. (2007) listed the following criteria necessary for ensuring benchmark tests correlate with state tests by aligning as closely as possible to 'state test blueprints':

Assessment purposes, domain specifications, and rationale for these specifications should include the cognitive demands of the test with a variety of simple (recall) to complex (problem solving and application) skills and procedures. Item and test development procedures should consider test length, test scheduling, and item development. Administration procedures and directions must "describe the qualifications of administrators, administration procedures, permissible variations in procedures, directions for administrators and test takers, and time limits" (Niemi et at., 2007, p. 9), while all stakeholders including "students, teachers, and schools should receive advance information about the content and format of the test" (Niemi et at., 2007, p. 9).

Scoring information should describe, "scoring and training methods for open ended items, possible differential weighting of items, instructions and possibly training for interpreting and using scores" (Niemi et at., 2007, p. 10). Also necessary are the procedures for determining student proficiency levels and what students the test is appropriate/inappropriate for.

Niemi et al. (2007) also found for effective implementation and thus correlation to state exams test developers and statistical analyzers must have the following set of skills and knowledge when implementing benchmark exams:

Content knowledge/expertise for each content area covered in the benchmark, basic understanding of item design/qualities of good items, knowledge of item scoring procedures including, if appropriate, use of rubrics, understanding of classification systems of different levels of cognitive skills/demands, basic understanding of properties of tests and their measurement, ability to conduct statistical studies of validity such as criterion group comparisons or evidence of differential validity. (Niemi et at., 2007, p. 14)

Instructor Perception of the Benefits of Benchmark Testing

Instructor perception of benchmark testing can be made positive by sustaining and supporting effective use of benchmark testing. Herman et al. (2010) mentioned four conditions necessary to sustain effective use of benchmark assessments to increase benefits to the school or district.

The district should begin with a written plan. The plan should be a written accountability plan which includes benchmark assessment procedures. The plan should include testing purpose(s), instructor responsibilities, specifics for reporting, an outline for data analysis and use, and instructor professional development specific to testing, analysis and data use.

Systems for analyzing and reporting data must be identified and described. The district must determine whether use of a prepared program or self-checked measures by instructors will be utilized. All analysis must be reader-friendly and available to administration and faculty in a timely manner.

Professional development must be provided to instructors for the understanding of analyzing and interpreting data. "Professional development should include content and

pedagogical skills that help teachers differentiate instruction and revise instructional strategies and approaches based on data" (Herman et al., 2010, p. 9). Finally, ample time must be allowed for both data analysis and interpretation.

If benchmark testing is to be used to drive or change instruction, stakeholders will require ample time to use benchmark testing effectively including data analysis related to taught content, addressing strengths and weaknesses noted in student understanding of content, instructor design and delivery of instruction, and planning for changes to instruction. Without strong district development and all mentioned conditions in place, the effectiveness of benchmark testing and instructor buy-in to utilization of data analysis has the potential to fail in providing the desired results to drive or alter instruction.

In exploration of educator focus group sessions to understand ways in which benchmark exams could be used as formative assessments to drive instruction, Abrams et al. (2015) discussed the necessity and desire by instructors in having "clear and strong" knowledge of testing expectations, direction in analysis, and specifics for using testing results. Instructors were more likely to use results to remediate or reteach curriculum in an effort to increase student achievement when clear guidance and expectations had been provided. Additionally, with clearly defined expectations, instructors regularly reviewed tests and provided immediate feedback to students. Abrams et al. (2015) also indicated instructors appreciated having a pacing or curriculum guide that identified the specific content standards that should be taught each quarter serving to identify the content the benchmark test would be designed to assess. This type of pacing guide or curriculum guide would assist instructors in collaborating with students to set future academic goals.

Student Engagement and/or Commitment

Woods (2020) observed that students value goal setting when it comes to classroom activities and lessons when taught appropriate ways of setting goals. "The growth mindset's focus on effort and process suggests exploring the use of goal setting as a specific process to support the growth mindset." He continued, "Goal setting activities designed to promote a growth mindset and help students build general skills, rather than skills specific to one course, were developed" (Woods, 2020, p. 6).

Woods (2020) also recommended students developing a performance plan to guide their work. He recommended focusing on the two areas of General Student Activities and Teamwork. The performance plan specific to general student activities focuses on activities that would occur in any course and activities that would help the student focus on learning outcomes specific to that course. The teamwork performance plan varies only to include activities specific to team assignments.

Woods (2020) additionally recommended students reflecting "on how creating and following a performance plan has helped their overall performance in the class, with specific discussion of their execution of activities to support their goals, whether they wrote the right goals, and how they might improve their goals or their work to achieve them. (Woods, 2020, p. 7)

Ironically, Woods (2020) guidance for student buy-in and understanding echoed guidance for instructors given by numerous researchers including providing goal setting: establishing district plans, understanding specific processes: benchmark testing design and analysis, independent content development: instructor knowledge of content

pedagogy through professional development, and teamwork: the establishment of learning communities.

Reviewing study results examining the role of teacher content-pedagogical knowledge and teacher use of assessment in student learning, Herman et al. (2011) added "students whose teachers spend more time and who more frequently engage in analyzing and providing feedback on student work achieve higher learning than students whose teachers spend less time and who less frequently do so" (p. 19). The study explained analysis of student work could appear as classroom discussions, written responses, examination of student notebook responses, and/or end-of-investigation assessments. These researchers speculated teachers engaging in on-going analysis of student work increase their own content-pedagogical knowledge creating a greater understanding of their subject area and curriulum. This knowledge then assists instructors in generating and using beneficial and content-rich formative assessments that have been shown to have a correlation in increasing student learning.

Programmatic Change

Eisenstat et al. (1990) argued when it comes to programmatic change, timing is everything. They believe "individual behavior is powerfully shaped by the organizational roles that people play. The most effective way to change behavior, therefore, is to put people into a new organizational context, which imposes new roles, responsibilities, and relationships on them" (Eisenstat et al., 1990, The Fallacy of Programmatic Change section). They support the following "distinctive steps" focused on commitment, coordination, and competence to bring about programmatic and organizational change. If

you look closely at this list, you will see the great commonalities shared with Guarino et al. (2018) *Guiding Principles* to building ownership.

- Mobilize commitment to change through joint diagnosis of business problems. A starting point must be a clear plan.
- Develop a shared vision of how to organize and manage for competitiveness.
 Following a commitment to change, the leader can assign new roles and responsibilities.
- Foster consensus for the new vision, competence to enact it, and cohesion to move it
 along. Allowing voice in the new vision will encourage acceptance and buy-in of the
 new plan.
- Spread revitalization to all departments without pushing it from the top.
 Institutionalize revitalization through formal policies, systems, and structures.
- Monitor and adjust strategies in response to problems in the revitalization
 process. The purpose of change is to create an asset that did not exist before a
 learning organization capable of adapting to a changing competitive environment.
 (Eisenstat et al., 1990, Six Steps to Effective Change section)

Instructor Voice in Change

Eisenstat's et al. (1990) distintive plan for change included the voice of the organization throughout. Instructors being heard is an essential element to building buy-in, embracing change, and utilization of change to drive instruction. Whitaker et al. (2013) pointed out the necessity of voice and communication going beyond words that are spoken and the necessity in "understanding the personalities and communication styles of the people you work with" adding "the need to show interest in others 'voice' by

allowing the expression of thoughts". Also noted was the value of showing 'sincere interest' by conducting follow-up and frequent conversations with stakeholders.

Authors Quaglia and Lande (2017) listed the following *student benefits* found to be a direct result of teacher voice being "embraced as a critical factor in the effectiveness of the school" and an "intrinsic part of developing policies to support learning" (p. 24-27).

Classroom teachers who viewed their voice as being valued had greater success inspiring student innovation, sustaining transformation, and creating the environment to build students' self-worth, engagement, and purpose. Additionally, there was direct correlation between teacher voice and innovation in student learning, increased student motivation, and student achievement.

Quaglia and Lande (2017) went on to develop a similar list of *instructor benefits* found to be a direct result of teacher voice.

Teachers who viewed their voice as being valued had greater potential for addressing challenges and the ability to value goals and work hard to reach them. Teacher voice was also shown to assist in increasing teacher retention and prompt innovative and meaningful professional development.

Kahlenberg and Potter's (2015) report supported Quaglia and Lande's (2017) findings noting "research shows that when teachers are engaged in school decision and collaborate with administrators and each other, school climate improves" (para. 1) which promotes "a better learning environment for students" (para. 1) with the direct results of raising student achievement. Kahlenberg and Potter (2015) added these mentioned gains

bring about a better teacher working environment which then support fewer teacher turnovers.

Instructors Understanding and/or Value of Data

Administration and faculty alike realize state testing results often arrive with little time to revamp curriculum or academic programs. These tests typically offer too little information to guide changes to instructional programs. Benchmark testing, on the other hand, is typically aligned to state standards and has the ability to monitor student progress and instructor effectiveness throughout the school year.

Baker and Herman (2005) contended benchmark testing to be diagnostically valuable if it provides feedback that is useful for instructional planning of both individual and groups of students. They asserted testing of high diagnostic value has the ability to first describe student performance and then explain why students are performing at certain levels and how educators should respond to the data.

Abrams et al. (2015) found it to be essential for instructors to have timely analysis and access to benchmark data results if students' strengths and weaknesses are to be identified, remediation and reteaching are necessary, and in recognizing any weaknesses in their instruction.

It is important to note, Abrams et al. (2015) pointed out instructors negatively viewed and were frustrated by the amount of time needed to review results stating that the time lost often affects instruction moving forward or the ability to keep pace with expected curriculum to be taught.

Process of Learning How to Analyze/Apply Data for Instructional Improvement

Following a study exploring factors that influenced faculty to consider or reject

using analysis of student data to improve instruction, Svinicki et al. (2016) found notable factors influencing faculty use of data to drive or alter instruction.

Teacher self-efficacy for student data gathering and use, Teacher beliefs about the value of student data, Teacher beliefs about the feasibility of making changes in their personal and institutional context, and Teacher beliefs about the effort required to use data for change were key to determining instructor adoption of data use. (Svinicki et al., 2016, p. 2)

Factor 1: Faculty Self-efficacy for Collecting and Using Student Data. Self-efficacy in this context is defined as instructors' belief in their own ability to successfully gather and interpret student data for improving instruction.

Factor 2: Faculty Beliefs about the Value of Student Data for Improvement Utility value of data. Utility value refers to the faculty member's beliefs about the ability of student data to inform instructional improvement.

Factor 3: Faculty Beliefs about Feasibility of Collecting and Using Student Data to Improve Instruction. This was defined as "the probability that a given task will be possible to complete, given the situation in which is carried out" (Svinicki et al., 2016, p. 3).

Heritage et al. (2008), through a National Center for Research on Evaluation study, noted the oddity of finding the use and analysis of assessment data to plan instruction as the most difficult notion by instructors. They then questioned what effect this finding had on formative assessment, instructor ability to adapt instruction to meet student need, and instructor ability to plan subsequent instruction. They recommended steps necessary to increase "teachers' knowledge of how learning develops in the domain

and on their pedagogical content knowledge", having the ability to translate "evidence into the next appropriate instructional steps that will move student learning forward, having a better conception of learning to work with learning, and deepening their knowledge of how the elements of student learning are manifested" (Heritage et al., 2008). These findings reiterate and support the previously noted need for establishing schools as communities, building learning communities focusing on collaborative learning, and providing valuable professional development through building instructor academic capacity, building relationships, and establishing growth mindset among faculty.

Summary

In returning to Guarino et al. (2018) *Guiding Principles* for building ownership, this literature review has established *buy-in and teacher ownership* as a process. The essential and vital need for leaders to increase value of programs must occur simultaneously with increasing the value of the educator. Educators must be made aware of needed changes, and it is necessary to welcome educators in contributing to the planning phases of reform.

Fostering trust and respect along with building relationships are noted as key to building educator buy-in. Leaders are additionally encouraged to inspire educators' efficacy, build valuable relationships, and develop collegiality among faculty and staff.

Creating transparency and supporting educators occurs through the practices of authentic leadership which includes educators in decisions, facilitates teacher voice, and involves listening to opinions *and remaining open*.

Decision making must be made based on research, *data* analysis, and *evidence* that supports and makes connections between performance goals and instructor individual interests and is invaluable when including benchmark testing in a district's plan to drive instruction.

Deeping educator knowledge should occur through increasing educator capacity using valuable and personalized professional learning experiences.

Finally, making teacher learning visible to enhance collaboration, inform decisions, and identify professional learning is supported through the crucial need to build learning communities within the school setting, endorse collaborative learning experience, and support the growth of knowledge of new practices and expectations.

CHAPTER III

Methodology

According to LSU Online and Continuing Education (2020), one common misconception about data-driven instruction is that it only focuses on teaching methods that lead to higher test scores. "In reality, data-driven instruction looks at the whole picture and uses dynamic student data to gauge individual and classroom comprehension, giving teachers insight into specific adjustments they can make to the curricula to improve student understanding" (LSU Online and Continuing Education, 2020).

[Additionally], "the use of student data to drive instruction also allows teachers to tailor their teaching methods to encourage student achievement" (LSU Online and Continuing Education, 2020).

This chapter will review methods of data collection and analysis used in determining best practices for developing instructor buy-in to using benchmark testing to drive instruction, root causes or resistances to valuing local benchmark testing, and programmatic changes necessary to increase the significance of these assessments and data driven instruction.

Purpose

The purpose of this qualitative research study, with a small quantitative data component, was to explore practices needed to create instructor buy-in to district initiatives, specifically the practice of using benchmark testing and the resulting data to drive, alter, and impact instruction positively contributing to sustained student knowledge and academic growth. The study explored instructor knowledge necessary in analyzing and using benchmark testing data in the classroom setting to improve lesson delivery and

continually meet diverse individual student needs. Additionally examined were the perception and root causes of resistance by instructors in using test analysis and resulting data to measure student improvement, align instruction through the use of statistical data, and plan for necessary remediation or differentiation.

An abundance of research, as discussed in chapter two, supported the value and necessity of organizational leaders establishing stakeholder buy-in. Buy-in, for the purpose of this study is defined as, the act of supporting a structural or operational practice or philosophy.

Hedges (2015) discussed a series of stages necessary in building buy-in to support desired reform or organizational change. His first stage included the recommendation of presenting the acknowledged problem or task initiative with the objective of convincing others there is a problem that must be addressed. He followed stage one, problem presentation, with outlining the projected reform or change measures as clearly as possible with "concrete examples ...of the solution" (Hedges, 2015, Coherent Idea section). Stage three involved stakeholders having the opportunity to convey their concerns and providing input. In Hedges' final stage to establishing buy-in, he supported exposing the projected changes to participant/stakeholder criticisms to acknowledge the areas that can be made stronger.

The results of this yearlong study were to provide the district with extensive information and insight regarding current instructor perceptions to the practices and expectations of benchmark testing, rationale for resistance to the use of testing data, common stakeholder concerns and needs, and trusted methods to establishing organizational buy-in to the benchmark testing initiative and future district initiatives.

The action research answered the following questions of:

- 1. How do educational leaders foster and build instructor buy-in to improvement initiatives?
- 2. What are the root causes or resistances to valuing local benchmark testing and utilizing benchmark data to drive or alter classroom instruction?
- 3. What programmatic changes to local benchmark testing, data analysis, and review are necessary to increase the significance of these assessments and data driven instruction?

Setting and Participants

Setting

The district in which this study took place is a small rural school district consisting of a single elementary school with grade levels kindergarten through six and a junior senior high school with grade levels seven through twelve. Table 1 shows, the district covers 94.84 square miles and has a total enrollment of eight hundred forty-two students with fifty-five percent of students being economically disadvantaged and two percent being homeless. Nearly twenty percent of the students receive special education services. Table 2 depicts the total revenue of the district for the 2018-2019 school year was \$15, 271,182.09 with seventy percent of funding received from the state, twenty-seven percent funding from local sources, and three percent funding from federal sources.

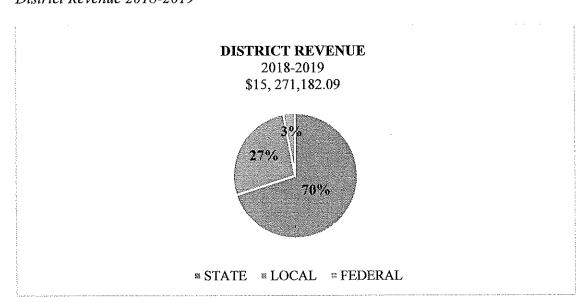
Table 1

District Demographics

District Demographics	
Enrollment Kindergarten through Grade Twelve	842 Students
Economically Disadvantaged	55%
Homeless	2%
Students Receiving Special Education Services	Nearly 20%

Table 2

District Revenue 2018-2019



The trend of declining population numbers and increasing poverty has also had a negative effect on community traditions and culture. Rarely is academic success the top priority of the community as a whole. Additionally, with the exception of sporting events, family engagement in school events typically produces low attendance and interest.

The administration in this district works as a close knit team sharing district-wide and collective goals of student success, desire to increase instructor and student expectations, rigor, and sustained student academic knowledge. Social emotional learning

and well-being of students is of equal importance. Each building has its own principal and shares an assistant principal and director of special education. The superintendent, now in his sixth year at this position has the greatest years of administrative experience, ten, of the current administrative team and was in the unique position of selecting all members and building this administrative team following many years of turnover and inconsistency in district leadership.

After years of mundane and irrelevant professional development, instructors now benefit from strategic, intentional, and planned professional development pertinent and aligned to district, instructor, and student needs. Realignment and acquisition of new district curriculum has occurred during the six years of the current superintendent replacing outdated materials with standards aligned, technology supported, and innovative materials.

Prior to these most recent changes, the district was in the cycle of annually declining state testing scores falling below the vast majority of surrounding school districts who share similar populations and economic demographics. The recent and overall climate improvement within the district along with improved professional development and curricula materials brought a positive upturn in scores initially only to then become stagnant showing little to no new growth. The stall in improving scores has created instructor concern and stress in not understanding why the continued instruction with updated curriculum is not producing on-going improved state testing score results.

The purpose of this study was to gain insight and awareness of methods that would build instructor buy-in and assist in creating an understanding and value of the existing, on-site, academic tool, benchmark testing, which, with proper use, would aide in

improved academic practices in classrooms, close academic gaps and/or deficiencies, and produce student growth in all subject areas.

Participants

Instructors in this convenience sample study were selected specific to those who teach English language arts and/or mathematics at grades three through eight and are the same instructors who also administer Pennsylvania System of School Assessments (PSSAs) and benchmark testing exams. Years of experience range from a first year instructor to that of an instructor with twenty years of experience.

The class setting at the elementary varies from grade level to grade level. Grade three students have two academic instructors daily, an English language arts (ELA) instructor and a mathematics/science instructor. There are four grade three classrooms in the elementary with a total of two ELA and two mathematic instructors. Grade three ELA is taught for a block of 126 minutes and mathematics is taught for 84 minutes. Grade four and five students also have two academic instructors daily, an English language arts (ELA) instructor and a mathematics/science instructor. Each grade level has three total instructors with the grade four homeroom instructors being responsible for grade four/five mathematics/science instruction and the grade five homeroom instructors being responsible for grade four/five ELA instruction. Grade four and grade five ELA is taught for a block of 126 minutes and mathematics is taught for 84 minutes. Grade six is more similar to a middle school model with each student seeing all three instructors: mathematics, ELA, and science/writing. Grade six ELA and mathematics are each taught for a block of 84 minutes with writing being taught for 42 minutes and science also being taught for 42 minutes. Grades seven and eight, located at the junior senior high school,

operate on a traditional bell period of 40 minutes. Grade seven and eight students attend one ELA and one reading period daily, grade seven mathematics meets two split periods daily and grade eight mathematics varies based on student ability with all students receiving at least a period of mathematics daily. Elementary instructors are supported through grade three with Title Reading pull out/push-in instruction. Grades four through eight have no additional ELA support and it has been well over ten years without Title Mathematics support at any grade level kindergarten through twelfth.

Recent curriculum updates include the fourth year use of the reading and writing series Benchmark Literacy at the elementary school level and first year use of Study Sync in grades seven and eight. New math curriculum, Go Math, has been in place for three years at kindergarten through grade eight. Both curriculums support the models of whole group mini lessons followed by differentiated, small group instruction. This concept has been a difficult change for several instructors who had collectively practiced whole group instruction with limited, if any, individual student differentiation or teacher-student conferencing. An additional initiative is the districtwide expected incorporation of ongoing formative assessment to drive instruction at all grade levels and subject areas kindergarten through grade twelve. Benchmark testing, grades three through eight, took place in ELA and math three times during this yearlong study. Benchmark exams were administered at the beginning of the school year, shortly before or after the Christmas holiday break, and a month prior to the PSSA testing window. Exams in grade four through eight are completed on the students' district-issued Chromebooks while grade three instructors and students reported to assigned computer labs to complete benchmark testing. A fourth exam had been traditionally given at the elementary level near the end of the school year in the hopes of gathering data of overall knowledge attained by students but had been chosen to be dropped from practice as it became evident students were not completing the exam to the best of their abilities creating false results and invalid data.

The district was also recently fortunate to provide 1:1 technology in the form of Chromebooks to students in grades four through twelve. This tremendous advantage has been met with some animosity by kindergarten through grade three instructors who view the lack of 1:1 devices at their grade level an inequity and have had a difficult time understanding that funding is not available for purchasing and sustaining additional devices at this time. Kindergarten through grade three instructors have approximately eight devices in each classroom that are to be used during small group instruction and center work.

Before recruitment of participants, the researcher received approval of this action research study, District Letter of Support, from the district's superintendent (Appendix A). Recruitment of instructor participants was through mailed correspondence explaining to each instructor the study would consist of a brief survey followed by a short interview. Additionally, potential participants were made aware of the length and confidentiality of the study. Participants were assured there would be no consequences if they chose not to participate in the study or if they began the study and then chose to leave the study prior to the end of the research period. Each was informed of the minimal risks of perhaps feeling uncomfortable in providing feedback that could be perceived as negative or complaining and given the option of not having to answer all questions. Participants signed and submitted an Informed Participant Consent (Appendix B) before being

included in the study. Seventy-five percent of the invited twelve instructors chose to participate in either the survey, interview or both portions of the study.

Local administration additionally participated in this study by way of an interview. This small school district in which the research study took place is surrounded by five similar sized school districts within a fifteen to thirty minute drive. Recruitment of leader participants was additionally through mailed correspondence explaining to each administrator the study would consist of a short interview. Additionally, potential participants were made aware of the length and confidentiality of the study. Leader Participants were assured there would be no consequences if they chose not to participate in the study or if they began the study and then chose to leave the study prior to the end of the research period. Each was informed of the minimal risks of perhaps feeling uncomfortable in providing feedback that could be perceived as negative or complaining and given the option of not having to answer all questions. Participants signed and submitted an Informed Participant Consent (Appendix C) before being included in the study. Fifty percent of the invited eighteen administrators chose to participate in this portion of the study.

Research Plan

Prior to conducting any research, in addition to obtaining permission from the superintendent of the district to be studied, the researcher obtained approval from the California University of Pennsylvania Institutional Review Board (Appendix D).

Interventions

This action research study investigated instructor perceptions of district initiatives, experiences with benchmark testing, opinions of the testing and data platform,

and academic practices within the instructors' classrooms. Inquiry data, "data used to gather information from participants about their knowledge, values, and beliefs, past experiences, feelings, opinions, attitudes, or perceptions", was gained through an initial electronic survey followed by an instructor face-to-face or phone interview (Hendricks, 2017). The survey process began after the first of three benchmark exams were administered. Both the survey and the interview looked at the following areas:

- Opinions of benchmark testing practices and data analysis
- Individual use of benchmark data to drive, alter, and/or improve classroom practices
- Value of professional development provided by the district in regards to benchmark testing and data analysis
- · Student value of benchmark testing
- Suggestions for improvement of benchmark testing practices

Additionally, this action research study investigated educational leader practices used to foster and build instructor buy-in to school initiatives specific to benchmark testing through the use of a face-to-face or phone interview. The educational leader interview looked at the following areas:

- Use of benchmark testing and data Analysis in the district
- Instructors value and use of testing and data
- District practices in building connections between benchmark testing and student success
- District use of professional development to support benchmark testing practices and data analysis

Building buy-in and creating a positive culture around benchmark testing
 This action research plan using inquiry data would provide the researcher with
 many different and sometime conflicting instructor perceptions and needed interventions.

Fiscal Implications

Direct costs to the district implementing action research findings would be minimal and come in the form of securing use of electronic exams through the Edmentum Company, administration and instructor professional development sessions, securing day-to-day substitutes, and conducting an administrative and instructor book study. A step in building buy-in would occur through securing needed and requested professional development by benchmark testing facilitator, Edmentum (for the purpose of this study), providing an in depth look at the testing itself and explaining standards being tested, reviewing and developing an understanding of the generated data, and cultivating the abilities to relate testing results to course curriculum.

Pairing learning targets with benchmark testing would assist the instructor in becoming more familiar with their taught content area while focusing on data-driven, goal-oriented instruction. In conjunction with benchmark testing professional development and training, instructors would also participate in an in-depth book study focusing on learning targets where they as learners would guide the session through simulated lessons developed around the use of learning targets.

Indirect costs would come in the form of time. It would be necessary for the district to embrace data analysis as a district initiative allotting ample time throughout the school year to focus on curriculum, testing procedures, proper review and analysis of resulting data, alignment to core standards, and most importantly instructor use and

understanding of expectations and procedures. Table 3 outlines items and materials required for this study along with costs of each item.

Table 3

Fiscal Implications

PRODUCT	PROVIDER	COST TO DISTRICT
Electronic Benchmark Testing Exams Grades Three through Eight	Edmentum	\$1900.00
Professional Development Specific to Benchmark Testing and Data Analysis	Edmentum	No Cost Part of Edmentum Bundle
Learning Target Book Study All Instructors K-12	ASCD	\$3600.00
Substitute Fees Covering Data Analysis Meetings/Sessions	Source4Teachers	\$110 per substitute Four Roving Substitutes HS Four Roving Substitutes Elem Three Days Annually \$880 X 3= \$2640

Research Design, Methods, and Data Collection

Research Design

A qualitative research approach, with a small quantitative data component, was used for this research study. "Qualitative research involves collecting and analyzing non-numerical data to understand concepts, opinions, or experiences. It can be used to gather in-depth insights into a problem or generate new ideas for research" (Bhabdari, 2020).

To explore research question one, building buy-in to district initiatives, qualitative data was collected in the form of transcripts and/or audio recordings of predetermined interview questions obtained from the focus group participants consisting of local district leaders, superintendents, and building principals (Appendix E). Questions were designed to determine use of benchmark testing in area school districts, supporting benchmark testing through professional development, building a positive and receptive culture to

benchmark testing, and increasing instructors' value and use of obtained testing data. Additionally, pertinent and relevant qualitative data was collected in the form of transcripts and/or audio recordings of predetermined interview questions obtained from the focus group of participants consisting of classroom instructors who utilize benchmark testing in the subject areas of English language arts or mathematics in grade levels three through eight (Appendix G). Information from both focus groups was used to establish emerging themes of building instructor buy-in to district improvement initiatives and benchmark testing practices and procedures.

In exploring the root causes or resistances to valuing local benchmark testing and utilizing benchmark data to drive or alter classroom instruction, research question two, qualitative data, with a small quantitative data component, was collected in the form of an instructor survey. Survey data was used to gather reliable perspectives and the value of benchmark assessment and data analysis procedures (Appendix F). Electronic surveys were conducted with the focus group participants consisting of classroom instructors who utilize benchmark testing in the subject areas of English language arts or mathematics in grade levels three through eight. Predetermined survey questions included knowledge of testing procedures, data analysis, and alignment of data to classroom practices, instruction, and differentiation. As a follow up to instructor surveys, the previously discussed instructor face-to-face or phone interviews were conducted to establish emerging themes of testing perspectives and assist in developing consistent themes for programmatic changes to current practices. Also contributing to the development of consistent themes related to root causes or

resistances to valuing local benchmark testing and utilizing benchmark data to drive or alter classroom instruction were pertinent and related responses from the previously discussed educational leader interviews.

To assist with research question three, determining what programmatic changes to local benchmark testing, data analysis, and review are necessary to increase the significance of these assessments and data driven instruction, qualitative data, with a small quantitative data component, was examined from the previously discussed instructor survey. Follow up instructor interviews was collated and compared with outcomes from the district leader interviews. Transcripts and/or audio recordings of predetermined interview questions obtained from the instructor and educational leader focus group participants were used to analyze needs for programmatic changes to local benchmark testing practices in an effort to increase the significance and use of benchmark testing assessments to drive and differentiate instruction.

Following the instructor survey and instructor and educational leader interviews, findings would be sorted first by theme and patterns, with conclusions to be displayed in both chart and narrative forms depicting correlated and connected results that illuminated root causes or resistances to valuing and using local benchmark testing by instructors. Recommended and/or suggested programmatic changes to be made to local benchmark testing to increase the significance of these assessments and prompt data driven instruction were additionally sorted first by theme and patterns with findings also being displayed in both chart and narrative forms. Finally, proven methods and strategies used by local leaders to build instructor buy in would be reviewed and listed in accordance to frequency of most highly successful and recommended methods and approaches. The

research of Hedges and Sujitparapitaya greatly influenced and guided the researcher in the development of the themes and patterns aligning to Hedges (2015) stages of developing buy-in and Sujitparapitaya's (2014) areas essential for building buy-in and increasing the motivation and performance of faculty.

Data Collection

Qualitative data, with a small quantitative data component, using surveys and interviews, were collected and completed November through March of 2020. Table 4 represents the timeline of dates that were utilized for conducting study research and collecting data from district instructors and local leaders.

Table 4

Timeline for Study and Data Collection

August 2020

- Acquire and receive District Letter of Support.
- Complete IRB paperwork and submit for approval.

September and October 2020

- Determine study participants for instructor survey and interview process
 specific to ELA and mathematics instructors grades three through eight.
- Obtain consent from participants once IRB approval has been granted.
- Invite instructors to participate in action research study; include research topic, method of research, description of data to be collected, and information on how collected data will be used.

Invite local area administrators to participate in action research project;
 include research topic, method of research, description of data to be collected,
 and information on how collected data will be used.

November 2020

- Provide instructors with surveys.
- Begin administrator interviews.

December and January 2020-2021

- Analyze instructor surveys looking for patterns and themes in instructor resistance when using local benchmark testing and data.
- Analyze instructor surveys looking for patterns and themes in local benchmark usage and perceptions of instructor buy-in
- Analyze administrator interviews looking for patterns and themes in local benchmark usage and practices used to build instructor buy-in.

February and March 2021

 Based on instructor survey results, meet with instructors to conduct interviews, Programmatic Changes to Local Benchmark Testing Practices
 Needed to Increase Significance of These Assessments.

April and May 2021

- Analyze and correlate instructor survey results and interviews.
- · Review administrator interviews.
- Correlate all gathered data

June 2021

Reflect on research findings.

NOTE: All items were completed within a reasonable window of the listed expected dates of completion. Conclusion of data collection may have varied slightly due to COVID 19 related events and/or happenings.

Date Collection Tools

Method of data collection and data tools to be used were submitted to the superintendent of the district to be studied and the Institutional Review Board for approval prior to start of research project. To better understand instructor perception of benchmark testing this research would first rely on a ten question, electronic, Likert scale instructor survey (Appendix F) asking instructors to utilize a rating of 1, 'Strongly Disagree' through 5, "Strongly Agree" to rank their perceptions of benchmark testing practices in the school district. Predetermined survey questions included knowledge of testing procedures, data analysis, and alignment of data to classroom practices, instruction, and differentiation. As a follow up to instructor surveys, face-to-face instructor interviews (Appendix G) were conducted to gain opinions and a deeper understanding of testing perspectives, root causes of instructor aversion in using testing data, and to assist in developing recommendations for programmatic changes to current practices.

Additionally, educational leader interviews (Appendix E) were used to determine use of benchmark testing in area school districts, supporting benchmark testing through professional development, building a positive and receptive culture to benchmark testing, and increasing instructors' value and use of obtained testing data. Table 5 indicates alignment of collection instruments to research questions.

Table 5

Data Collection Instruments

RESEARCH QUESTION	TYPES OF DATA COLLECTED	DATA SOURCES	TIMELINE FOR COLLECTING DATA
How do educational leaders foster and build instructor buy-in to improvement initiatives?	Qualitative	District Leader Interviews	District Leader Interviews November 2020 through March 2021
		Instructor Interviews	Instructor Interviews February 2021 through March 2021
What are the root causes or resistances to	Qualitative	Instructor Survey	Instructor Surveys November 2020 through January 2021
valuing local benchmark testing and utilizing benchmark data to drive or alter classroom instruction?	with a small quantitative data component.	Instructor Interviews	Instructor Interviews February 2021 through March 2021
		District Leader Interviews	District Leader Interviews November 2020 through March 2021
What programmatic changes to local benchmark testing, data analysis, and review are necessary to increase the significance of these assessments and data driven instruction?	Qualitativa	Instructor Survey	Instructor Surveys November 2020 through January 2021
	Qualitative with a small quantitative data component.	Instructor Interviews	Instructor Interviews February 2021 through March 2021
		District Leader Interviews	District Leader Interviews November 2020 through March 2021

District leader interviews consisted of eight questions, were conducted individually, and varied in total length from thirty to forty minutes. Leader interviews resulted in transcripts and/or audio recordings of predetermined interview questions obtained from the focus group consisting of local district leaders, superintendents, and building principals, and would be used to gain an understanding of building instructor buy-in to district improvement initiatives and benchmark testing practices and

procedures. Questions were designed to determine use of benchmark testing in area school districts, supporting benchmark testing through professional development, building a positive and receptive culture to benchmark testing, and increasing instructors' value and use of obtained testing data.

Instructor surveys were distributed via Google Survey and through emails sent to participants. Then ten question survey could be completed in a ten minute time period. Surveys were created and used to gather reliable perspectives and value of benchmark assessment and data analysis procedures. Surveys were conducted with a focus group consisting of classroom instructors who utilize benchmark testing in the subject areas of English language arts or mathematics in grade levels three through eight. Predetermined survey questions included knowledge of testing procedures, data analysis, and alignment of data to classroom practices, instruction, and differentiation.

The eleven question instructor interviews were conducted individually and were completed between thirteen and thirty minutes. Instructor interviews were utilized following the instructor survey to gain a deeper understanding of instructor testing perspectives and assist in developing recommendations for programmatic changes to current benchmark testing practices. Transcripts and/or audio recordings of predetermined interview questions obtained from the focus group consisting of classroom instructors who utilize benchmark testing in the subject areas of English language arts or mathematics in grade levels three through eight were used to analyze needs for programmatic changes to local benchmark testing practices in an effort to increase the significance and use of benchmark testing assessments to drive and differentiate

instruction. Questions were designed to determine value of benchmark testing, and need for programmatic changes.

Validity

Hendricks (2017) describes validity as "the trustworthiness of the study" and uses Lincoln and Guba's trustworthiness criteria to test validity.

The criteria are:

- Credibility: The plausibility of the research findings for the context that was studied.
- Transferability: The extent to which results of a study are applicable to other contexts and other individuals.
- Dependability: The degree to which research results would replicate with the same or similar participants and/or contexts.
- Confirmability: Showing that results are an accurate representation of what occurred rather than the result of the researcher's bias, motivation, or interest.

Multiple sources of data in the form of surveys and varying interviews were collected in the necessary steps to triangulate data sources increasing the credibility of the findings. The qualitative data results of the surveys, instructor interviews, and educational leader interviews support one and other clarifying questions and the resulting data obtained. Data was triangulated using credible and multiple methods, categorizing, comparing, evaluating, and collating data sources throughout this study reviewing evolving, consistent themes of instructor perception, leader insight, and preexisting benchmark testing practices and procedures. Interviews and survey questions were validated to determine consistency in responses. The interviewer asked focus questions of

both the educational leader and instructor participants only straying from developed questions to ask for elaboration or clarification. Revealed practices assisting in increasing stakeholder buy-in are transferrable to numerous organizational initiatives, studied subjects and participants were dependable in responses, reactions, and replies, and all data is representative of the research without researcher bias.

Summary

The methodology presented in this chapter provided and in-depth look at the procedures used and organization of collected data in studying benchmark testing practices in a small rural school district. The goal of this study was to understand the instructor perception and use of benchmark testing and data analysis to drive and alter classroom instruction with the goal of improving student learning experiences.

Additionally the research study was designed to explore practices desirable and programmatic changes necessary in creating instructor buy-in to district initiatives while examining the root causes of resistance by instructors to valuing and using local benchmark testing.

Chapter Four will provide an in-depth analysis of collected data and a description of the results of this research.

CHAPTER IV

Data Analysis and Results

This action research study was designed to gather information from educational leaders and classroom instructors determining methods to build buy-in to district initiatives, specifically local benchmark testing. The desired result of the district studied is for annual benchmark testing to facilitate analysis of successful instruction, evaluate student learning, and review student growth in real time with immediate and constructive results. This study gathered instructor and administrator perceptions exploring classroom instructor buy-in to local benchmark testing, defined preexisting resistance to using benchmark testing to cultivate data driven instruction, and developed recommendations for programmatic changes to current practices.

The purpose of this qualitative study, with a small quantitative data component, was to examine administrator and instructor perceptions to determine possible barriers to instructors for using benchmark testing to drive, alter, and improve instruction. Why were instructors not using data to formulate differentiation in the classroom? Why were many instructors never reviewing testing data to evaluate the success or needs of their instructional practices? The following research questions guided this study:

- 1. How do educational leaders foster and build instructor buy-in to improvement initiatives?
- 2. What are the root causes or resistances to valuing local benchmark testing and utilizing benchmark data to drive or alter classroom instruction?

3. What programmatic changes to local benchmark testing, data analysis, and review are necessary to increase the significance of these assessments and data driven instruction?

Data Analysis

Of the sixteen instructors invited to contribute to this action research study twelve elected to participate in the full study. To be eligible for participation instructors were required to teach in a grade three through grade eight English language arts or mathematics classroom and administer benchmark and PSSA, Pennsylvania System of School Assessments, testing in their taught subject area. Nine participating instructors were elementary level instructors, grade three through grade six, while three participating instructors were junior high school instructors (Table 6). Of the nine elementary instructors, 44% of participants taught English language arts, 44% of participants taught mathematics, and one instructor, 12% of participants, worked with both English language arts and mathematics. Junior high school instructors were represented by 67% of junior high participants teaching English language arts and 33% of participants teaching mathematics. Years taught by these instructors ranged from a single year to twenty years (Table 7). Five instructors possessed Instructional Level I Certification while seven possessed Instructional Level II Certification (Table 7 and Table 8). In Pennsylvania, Level I instructors are instructors new to the profession whereas Level II instructors have taught no less than three satisfactory years, have earned twenty-four post-baccalaureate credits, completed a Pennsylvania Department of Education induction program within in the district they teach, and successfully applied to the Department of Education and have been awarded their Level II Certification.

Table 6Instructor Participants

Instructors	Elementary	High School	Totals
Invited to Participate	10	6	16
Participated in Study	9	3	12
Percent Participating	90%	50%	75%

Table 7

Elementary Instructor Demographics

Elementary Participants	Years Teaching	Instructional Level
A	4	I
В	1	I
C	5	П
D	3	I
E	4	П
F	9	II
G	11	П
Н	9	П
I	2	I

Table 8Junior High School Instructor Demographics

Junior High Participants	Years Teaching	Instructional Level
J	20	П
K	6	П
L	2	I

Eighteen educational leaders were invited to participate in this action research study from five local school districts (Table 9). The nine educational leaders electing to participate include seven principals and two superintendents.

Table 9Administrative Participants

Administrators	District A	District B	District C	District D	District E	Totals
Invited to Participate	3	5	4	3	3	18
Participated in Study	0	1	4	1	3	9
Percent Participating	0%	20%	100%	33%	100%	50%

Instructors were first surveyed using a ten-question Likert scale survey (Appendix F) measuring instructor perceptions of building buy-in, benchmark testing, and looking for possible root causes or resistances to local testing processes. Following this brief survey, instructors participated in an interview taking a deeper look at what was needed to transform instructors' understanding of benchmark exams, testing processes, and use of produced data to benefit their daily classroom instruction. Instructor interviews aided the researcher in fully understanding instructor needs, concerns, or misinformation when it came to benchmark testing. Instructor interviews were semi-structured following predetermined questions (Appendix G) only straying from initial questions for elaboration or clarification. All instructor interviews were conducted, audiotaped, and transcribed by the researcher.

The educational leader interviews aided the researcher in gathering varying leader opinions of buy-in strategies and philosophies, building culture, and the value of benchmark testing. Leader interviews were semi-structured following predetermined

questions (Appendix E) only straying from initial questions for elaboration or clarification. All educational leader interviews were conducted, audiotaped, and transcribed by the researcher.

Following both the instructor and educational leader interviews, data was reviewed looking to identify emerging patterns or themes aligning to and supporting the research questions. "Qualitative data sources... can be explained and used to answer research questions only after they have been interpreted. This process requires deeper analysis of data than those processes used to explain quantitative data sources" (Hendricks, 2017). After ascertaining patterns and themes by research questions, topics were coded according to Guarino et al. (2018) *Guiding Principles* necessary for building ownership:

- Build teacher ownership instead of just buy-in.
- Foster and strengthen an unbreakable trust among all stakeholders.
- Create transparency and remain open to staff and public input and critique.
- Make decisions based on quantitative and qualitative data and evidence.
- Deepen teacher knowledge by developing a collective lens based on focus,
 coherence, and rigor.
- Make teacher learning visible to enhance collaboration, inform decisions, and identify professional learning to support implementation.

Guarino et al. (2018), suggests "teacher ownership contributes to a successful rollout and stronger implementation". The researchers go on to specify the importance of including all stakeholders in the process of professional learning mentioning "increasing capacity would mean leveling a perceived hierarchical structure so that staff at all levels

felt comfortable participating" (Guarino et al., 2018). [The professional learning included] "both alignment of curriculum and instructional practices" which valued "transparency, teacher agency, participatory decision making, and professional learning" (Guarino et al., 2018, p. 31).

Action Research Study Results

Survey Results

Fifteen of the sixteen instructors, 94%, invited to participate in the research study elected to complete the brief Instructor Perceptions of Benchmark Testing in the Elementary and Junior Senior High School Survey. Three of these individuals eventually removed themselves from the study electing not to participate in the interview portion of the research. With the survey responses being collected anonymously, correlation between those completing the survey and interview was unobtainable.

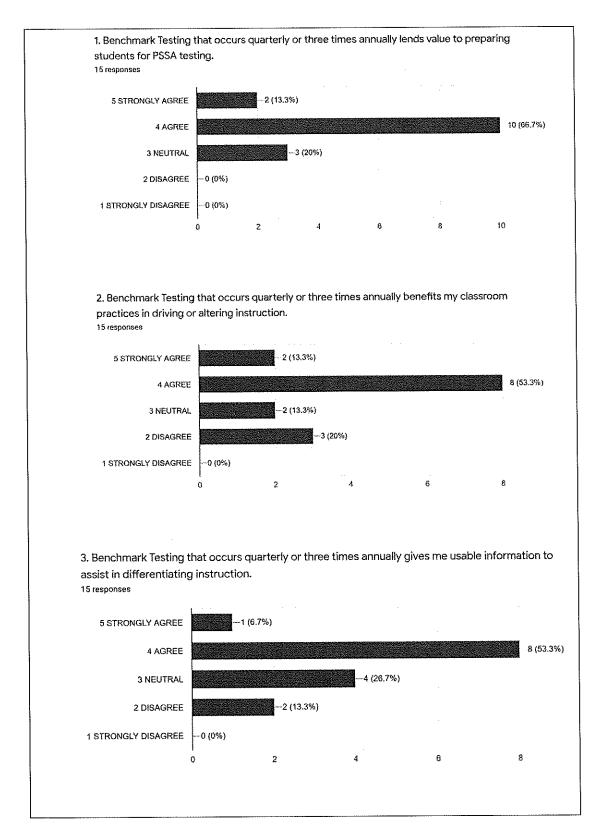
Instructors were introduced to the ten question, five point (strongly agree to strongly disagree), Likert scale survey explaining they would be asked questions about their experience with benchmark testing, their familiarity with analyzing benchmark testing data, their use of testing data to drive or alter instruction, and their perception of the value of benchmark testing in core tested subject areas.

Regarding buy-in and research question one, "How do educational leaders foster and build instructor buy-in to improvement initiatives?", answers to survey questions one through three indicated buy-in to the value and use of benchmark testing was in place by many instructors within this district (Figure 1). Twelve of the responding fifteen instructors, 80%, found value in benchmark testing, eleven of the responding fifteen instructors, 73%, felt benchmark testing benefited classroom practices in driving or

altering instructional practice, and nine of the responding fifteen instructors, 60%, agreed or strongly agreed that benchmark testing data provided valuable information to assist with differentiating instruction.

Figure 1

Instructor Survey Questions One through Three



Additionally, twelve of the responding fifteen instructors, 80%, were comfortable in navigating whole class and individual student results, survey questions five and six (Figure 2), while an additional eleven of the responding fifteen instructors, 74%, found the data correlated to the curriculum they teach, survey question seven (Figure 3).

Figure 2

Instructor Survey Questions Five and Six

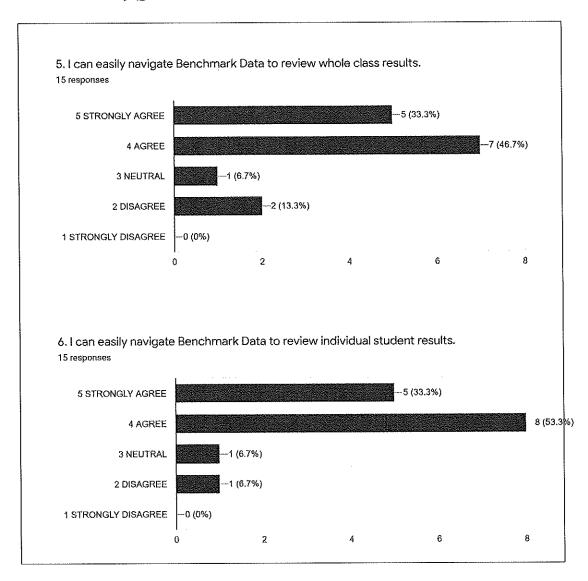
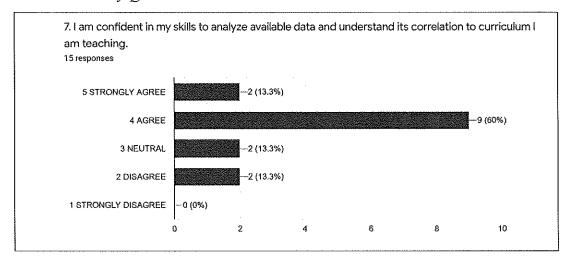


Figure 3

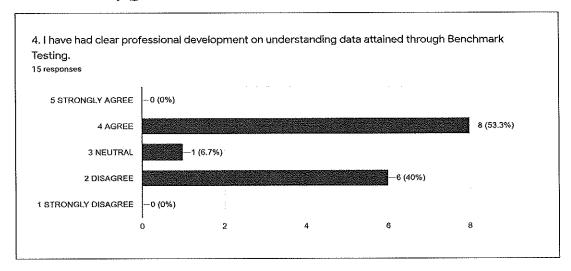
Instructor Survey Question Seven



Regarding research question two, "What are the root causes or resistances to valuing local benchmark testing and utilizing benchmark data to drive or alter classroom instruction?", and research question three, "What programmatic changes to local benchmark testing, data analysis, and review are necessary to increase the significance of these assessments and data driven instruction?", answers to survey question four show eight of the responding fifteen instructors, 53%, agreed they have had clear professional development on understanding benchmark data. The remaining seven of the responding fifteen instructors, 47%, were either neutral or disagreed that they have had professional development in the areas of understanding benchmark data (Figure 4).

Figure 4

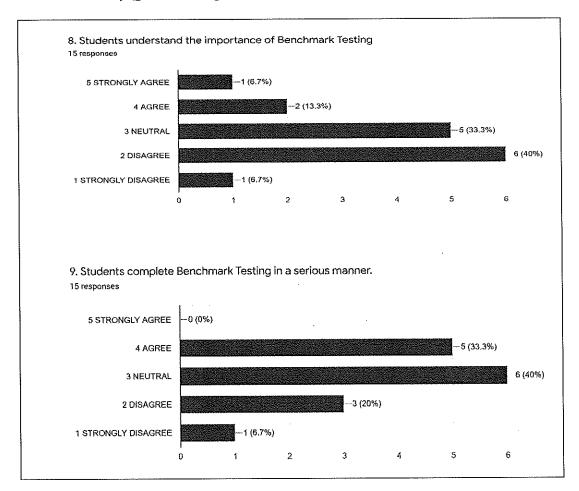
Instructor Survey Question Four



Survey questions eight and nine asked specifically if students understand the importance of benchmark testing and complete the testing in a serious manner (Figure 5). Twelve of the responding fifteen instructors, 80%, were neutral, disagreed, or strongly disagreed that students understand the importance of the benchmark test. Ten of the responding fifteen instructors, 67%, were neutral, disagreed, or strongly disagreed that students complete the benchmark test in a serious fashion.

Figure 5

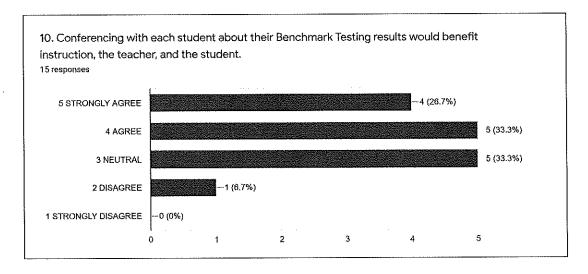
Instructor Survey Questions Eight and Nine



Survey question ten indicated nine of the responding fifteen instructors, 60%, agree or strongly agree conferencing with each student about their benchmark test results would benefit instruction, the teacher, and the student (Figure 6).

Figure 6

Instructor Survey Question Ten



Following this survey, instructors were given the opportunity, through interview, to further explain their thoughts on building instructor buy-in to local benchmark testing, defining preexisting resistance to using benchmark testing to cultivate data driven instruction, and develop recommendations for programmatic changes to current practices.

Instructor Interview Results

Research Question One

Through the instructor interview process, the following three major themes emerged answering research question one, "How do educational leaders foster and build instructor buy-in to improvement initiatives?" Theme One: Buy-in does not occur bilaterally in an organization. Theme Two: Buy-in can take place only if stakeholders understand the process and purpose of the initiative. Theme Three: Buy-in to benchmark testing was established with greater ease for those valuing the use of data to drive instruction. Instructor input was arranged according to Guarino et al. (2018) *Guiding Principles* necessary for building ownership.

Building Ownership. Several instructors expressed the desire to build ownership through self-management. When asked about the value of benchmark exams, Instructor H indicated she preferred the newest benchmark testing the district is currently using, Study Island, but would feel more comfortable if she had options to alter the exam using language and vocabulary she feels the students would understand stating, "I do like that it (benchmark testing) changed to Study Island. Could we change some of the wording? I don't know that that is an option".

Instructor I specified she desired to understand data analysis to a greater degree as she became more familiar with the exam. She expressed her gratitude in having data analyzed by others, rather than doing the work herself, and then presented to her for use in driving instruction in her classroom sharing, "I liked giving the teachers the data that people had collected. It was easier [and] less work for me to look at and interpret."

Instructor D confessed she struggled with buy-in confiding, "Sometimes I find it difficult to alter instruction when you are working with the curriculum. It is hard to get through all of it and change if you notice they are falling behind in an area."

Fostering and Strengthening Trust. Instructors had varying levels of trust when it came to the benchmark testing process. Instructor E appeared to trust the testing process noting,

Progress monitoring of student performance in helping align instruction with standards in small group instruction is definitely vital in helping schools move forward. It can set goals. Teachers can do this in their classrooms to help their students achieve success and just communicating this information with families so that they can be on board.

Instructor F and J had far less trust in the testing process. When asked if she had noticed any correlation between local benchmark testing and student scores on annual state testing Instructor F simply answered, "Not that I can see." Instructor J believed,

It (benchmark testing) does [have some value] but only at certain points throughout the school year. At the beginning of the school year, because the benchmark covers the entire years' worth of material, I don't find it as easy to use to drive instruction because it is too much information. Obviously, they (the students) are not going to score proficient out of the gate on every concept.

Creating Transparency. Instructor F clearly wanted to get the message across the fewer benchmark exams taken the better noting,

I think they (benchmark testing) are beneficial. I think that three as opposed to four is a good number. I think they are beneficial in showing overall growth but I guess the reason I don't do a lot of instructional like changes, it doesn't really drive my instruction, is because they (the students) usually score so low, they need it all. They come in scoring twenty some percent, that doesn't really help me. I just have to teach the curriculum. Then the second one (second exam), a lot of times, they maybe go up ten percentage points. So then they are at thirty [percent]. They just still need it all... They really just need the whole curriculum.

Data Based Decisions. Instructor A preferred the data reporting methods of the newest benchmark test, Study Island. She described the past program of grading her special education students' tests with inaccuracy revealing, "When it was the Sadlier stuff I didn't really use it because it wasn't graded right and for Special Education it was hard

to figure out how to gauge it and with the Study Island stuff it is a lot easier to look at and I actually use the data now."

Teacher B agreed with the value of benchmark data replying,

I feel it (benchmark data) is valuable to see a starting point of a student coming to a new grade level at the beginning of the year. It is valuable to have a starting point for some data collection and differentiation for a group you are working with. It (benchmark data) is valuable for midyear progress reports of student growth to see how much they have improved or what they need to continue to improve on and to be used again to guide instruction.

Develop a Collective Lens Based on Focus, Coherence, and Rigor. Instructor

A found the exam helped her focus on where students are entering her class at the

beginning of the school year and what specific needs they were having stating,

It (benchmark data) gives me a better gauge especially at the beginning of the year, especially when the ... graders come up because I don't know them. I will look at it (benchmark data) from the previous year. At the beginning of the year, when we do our first test, it gives me a pretty good idea what they came up to me knowing... and don't know."

Instructor C added,

To plan remediation I also compare my data with the data of other teachers the best that I can. Then I talk to the teacher who's doing the same curriculum and try to figure out if there is an area they are better at and I use it and try to guide my instruction and make changes.

Instructor G used her data to, "go back to look at stuff you have already taught and they (the students) have been tested on and see who is struggling in an area or has forgotten something and use it and to go back and review." Instructor B agreed, "[The data] is useful to drive and alter instruction. For example, looking at the midyear test I was able to look at the categories... see how the students were performing [and] modify their (the students) groups seeing what area I needed to continue to focus on."

Identify Professional Learning to Inform Decisions. Instructor C noted the value of the testing platform itself saying, "Study Island [exams] will provide data with correlation with... [the] state tests. Study Island is very good at this; they (the Study Island test designers) know how to change the questions to reflect what the state is looking for."

Research Question Two

Through the instructor interview process, the following three major themes emerged answering research question two, "What are the root causes or resistances to valuing local benchmark testing and utilizing benchmark data to drive or alter classroom instruction?" Theme One: Instructors were split on whether or not they had received valuable professional development. Theme Two: Accuracy of test results were questioned based on the importance students place on the exam. Theme Three: Valuable instructional time is lost on administering the exam, reviewing data, and altering instruction. Instructor input was arranged according to Guarino et al. (2018) *Guiding Principles* necessary for building ownership.

Building Ownership. When discussing the need for student ownership of testing practices, Instructor B expressed the lack of value students place on exams voicing,

I think it (benchmark testing) would be more important to them (the students) if THEY had... if they had a better understanding [of] why they are taking it (benchmark testing), or see their scores, and maybe use it to make goals for themselves. I just don't feel they are really connected to it. So even though they take it seriously and know they have to take their time on it, I don't feel like... I feel like they could be more engaged in it.

Instructor E supported this thought with, "When the students can be involved they set goals and they are motivated by their improvement."

Fostering and Strengthening Trust. Instructor C spoke of not having time to collaborate with colleagues in an effort to build a trusted support group remarking, "To have time in professional development to specifically work with other math teachers just to actually plan how we can remediate different topics. This year has been impossible to find time. I find conversation with other teachers extremely valuable."

Creating Transparency. Instructor K questioned the overall value of the exam verses the instructional time lost, "I think there is some value. I'm not sure the value outweighs the time that is given up to it. In a way there is an immunity that comes from doing it multiple times. The students aren't viewing it as serious as they should."

Instructor A was transparent explaining her frustration and overwhelmed emotions with the testing process and expectations, "Because it (testing) is crazy. Like my first group of kids... were just coming into the benchmark curriculum and... there was a lot of parts of speech and that kind of stuff that they didn't know it (the tested material) and [have] no idea what it was."

Data Based Decisions. Instructor K shared more diverse and individual data would be beneficial,

We have met as a department a number of times during PD (professional development) where our topic has been benchmark testing and what we want to achieve. The direction [was] given by administration. We have done that (analyzed data) together and with the principal. It is an actively engaged activity. They (administration) get us coverage. It is really rushed to look at a whole benchmark test in forty-five minutes; it should be a whole day activity... That (individual student data analysis) is something that is lacking. I really feel that we are not actively engaged at analyzing individual student data as much when we do it as a group (whole group student data analysis). To me that is where I think we could be more efficient at isolating which students really need more help with what skill and who is going to do that and how are we going to do it and what do we want to see occur next time.

Develop a Collective Lens Based on Focus, Coherence, and Rigor. Instructor A agonized over the discrepancy of exam procedures for her students mentioning, "So for special education... we test at instructional level with the locals (benchmark tests) but [at] grade level with [the] PSSAs (Pennsylvania System of School Assessments)."

Instructor K questioned the accuracy of the exam relating,

The problem [is] we are still guessing at the accuracy of the testing because of the lack of seriousness at which the students take it. We are not always sure should we spend all this time going back and reteaching this or that. Do the kids not know it or are they not trying. Could that time be better off to go on and work on

something new or something maybe they really don't know. We are guessing when looking at the data. Is this accurate data and should we use this to drive so much of what we do? Is it worth taking a lot of time to go back and reteach [curriculum] maybe we think they should already know and sacrifice something new or something that they don't have that much experience with?

Identify Professional Learning to Inform Decisions. By far, professional development was the most disagreed upon topic discussed. Several instructors believed they have had some professional development that has not made an impact on them, others were sure they have had no benchmark testing professional development, and a small group felt the professional development received from administration in grade level or department meetings was all they required.

Instructor A recalled, "Our one Study Island thing we had, the woman talked about how their standards in Study Island pretty much aligned to everything that PA (Pennsylvania) has in their standards." Instructor E spoke of an optional after school meeting saying, "(There was) a PD (professional development) session held by a teacher when we got our newer benchmark and they were able to show how you could view different reports." Instructor G responded to the question, "Have you been, at any time while teaching in the district, provided professional development that explains the goals of benchmark testing?" with, "Not sure".

Instructor B expressed she would be "interested in learning more about how to use it (analyzed data) to drive my own instruction." Instructor D agreed, "It would be nice to have something on analyzing the data and showing us how to alter our instruction based

on the data."

Research Question Three

Through the instructor interview process, the following four major themes emerged answering research question three, "What programmatic changes to local benchmark testing, data analysis, and review are necessary to increase the significance of these assessments and data driven instruction?" Theme One: Conferencing with students about individual testing progress or growth may add value and meaning of the tests for students and add to the validity of the exam. Theme Two: Additional professional development is needed on analysis of data and understanding how tests and data align to curriculum. Theme Three: A quick turnover from student completion of testing to review of analyzed data is imperative. Theme Four: Students should, in some way, be rewarded for growth on exams. Thoughts on an intrinsic or extrinsic reward system varied greatly. Instructor input was arranged according to Guarino et al. (2018) *Guiding Principles* necessary for building ownership.

Building Ownership. Regarding ownership, Instructor A discussed having data available at her fingertips verses waiting for administration or the data team to analyze and distribute gathered data explaining, "[Through the testing platform analysis link] you have access to all your students. It is easier because you don't have to wait for someone to give that (data) to you. You can go in and look at that anytime you want to."

Instructor L communicated the value she experienced when permitted by administration to preview upcoming testing practices, procedures, and analyzed data mentioning, "My ... students took the ... exam. I gave the Study Island benchmark test to

see if it was a true predictor of student success on the exam. The results were close to how students actually scored on the test."

Contradicting Instructor A and L's thoughts, recollect in the research question two discussion, Instructor K made reference to the lack of and need for additional individualized student data results saying,

That (individual student data analysis) is something that is lacking. I really feel that we are not actively engaged at analyzing individual student data as much when we do it as a group (whole group student data analysis). To me that is where I think we could be more efficient at isolating which students really need more help with what skill and who is going to do that and how are we going to do it and what do we want to see occur next time.

Fostering and Strengthening Trust. Numerous instructors mentioned the value of building relationships with students to foster trust in the accuracy of the exam. Several mentioned the practice of conferencing with students. Instructor H acknowledged,

I do conference with them (the students) to show scores, the last score and this score, and if I see a pattern and I try to explain why. They do want to do better. They are looking for a higher score but I don't think they are working towards a goal. They are just looking for a better number. Conferencing helps. It (conferencing) puts it (testing process/data) into perspective for them.

Instructor B added,

I think it is important to conference with the whole group but I have conferenced with each student and shown them their scores. I show them how they have progressed and what they need next time to bump up to proficiency.

They (the students) were very motivated ... they were excited if they made progress, and they asked how they could move from one level to the next. I want to have them come up with a goal.

Creating Transparency. Instructors were excessively transparent noting changing student attitudes toward the exams would create more valuable and reliable data. Unfortunately, none claimed to have the answer or know-how in developing a positive student attitude. Instructor L admitted, "I don't know what the secret [is] to getting students to buy-in to the benchmark tests. I feel part of it is the relationship to the teacher and the other part is the value the student has placed on school."

Instructor I felt, "The way to produce student value is to give a score within the classroom." Instructor K supported this thought stating, "Get kids to want to do their best on the exams. Improving their skill level is important." She felt praise is important voicing, "Praise the student and make the student want to try more and show improvement. They (the students) need more individual praise to try better on the next test to feel good about themselves."

Others wanted a reward system for students. Instructor C felt, "There should be some tangible results of the student improving, not their score, but for improving. I tell them, 'You don't know everything on the test. This (the test) is to help me know what you know.' So you can't base it (the reward) just on their score."

Instructor F and D supported a tangible reward system noting respectively, "I've talked about it with other teachers. I don't know if it is even a possibility, but maybe like a whole wide school party... I think that would add more value if they see it as a district-wide thing" and "I try to reward their progress. I give them something from the prize box

or free time. I think if we make that building-wide maybe more kids would try because they know there is a reward in the end."

Data Based Decisions. Instructors expressed great interest in understanding how benchmark testing aligns to standards and curriculum taught. Recall from the research question two discussion, Instructor B expressed she would be "interested in learning more about how to use it (analyzed data) to drive my own instruction." Instructor D had agreed, "It would be nice to have something on analyzing the data and showing us how to alter our instruction based on the data." When Instructor G was asked, "Is there any specific or additional area of interest in regards to benchmark testing?" she answered, "Just probably more on the scores and connecting more to the curriculum."

In respect to turnover time from administration of exam to reviewing data to altering instruction, recall from the research question one discussion, Teacher A preferred the data reporting methods of the newest benchmark test, Study Island. She described the past program of grading her special education students' tests with inaccuracy revealing, "When it was the Sadlier stuff I didn't really use it because it wasn't graded right and for Special Education. It was hard to figure out how to gauge it and with the Study Island stuff it is a lot easier to look at and I actually use the data now."

Teacher B had agreed with the value of benchmark data in regards to turnover time from test administration to review of data results replying,

I feel it (benchmark data) is valuable to see a starting point of a student coming to a new grade level at the beginning of the year. It is valuable to have a starting point for some data collection and differentiation for a group you are working with. It (benchmark data) is valuable for midyear progress reports of student

growth to see how much they (the students) have improved or what they need to continue to improve on and to be used again to guide instruction.

Develop a Collective Lens Based on Focus, Coherence, and Rigor. Instructor J was adamant about personally understanding the values and scoring of the exams. She felt that in order to conference properly with students she needed to understand how each level, Advanced, Proficient, Basic, and Below Basic is tabulated. She demanded that she would like to be informed, "How they (the testing platform) compute their proficient, basic, below basic scores. I'd like to know the math behind that."

Identify Professional Learning to Inform Decisions. Again, instructors continued to express wanting additional professional development. Instructor A added. "I feel that (data analysis) is an area that I've always struggled in... like analyzing data and that kind of thing and I would be interested in that."

Others mentioned the importance of understanding the proper methods in setting goals for instructors and students. Instructor E mentioned,

In my experience, overall students take their performance seriously and they want to see improvement especially if they have guidelines of what they want to improve on or goals they have set. Once you have that initial benchmark data that may be a brief conversation on showing the students how they may have scored on that (the exam) and having the conversation about how much they would like to improve or areas they would like to improve upon whether that is a percentage or one domain, whether that is one strand. Whatever it happens to be, that is manageable for that student or as the class for the teacher and then checking back, monitoring that progress specifically with the next benchmark and finally with the

final. There is a lot of conversation and it doesn't have to take a lot of time. It might just be the start of the small group instruction meeting with those students briefly, homeroom time, or the end of the day.

Educational Leader Interview Results

Research Question One

Through the educational leader interview process, the following three themes emerged answering research question one, "How do educational leaders foster and build instructor buy-in to improvement initiatives?" Theme One: Buy-in is built through establishing instructor ownership, building trust, and nourishing educator responsibility. Theme Two: Listening, allowing instructor voice and contributions, and creating a 'want-to' aides in developing a culture of buy-in. Theme Three: High-quality professional development must be available, on-going, and aligned to the needs of the district and the wants of the instructors. Leader input was arranged according to Guarino et al. (2018) *Guiding Principles* necessary for building ownership.

Building Ownership. Several leaders developed ownership through empowering their instructors. Administrator A encouraged instructors to voice their needs asserting, "[We facilitate] grade level and department meetings to discuss needs of the teachers that they would have for their students, what tools they would need whether it be technology or anything along those lines." Administrator D concurred. When asked about building buy-in, he was quick to add his philosophy of, "Give teachers the freedom in the classroom."

Fostering and Strengthening Trust. Multiple leaders discussed methods of establishing trust. Administrator A talked about trusting instructors through building responsibilities stating,

I think it (benchmark testing) has to become part of their (the instructors') responsibility and a shared responsibility between administrator and teachers. This year we developed a set of questions that we sent along with the data and then said [that] in a few days we are going to be meeting to discuss these, please be prepared to answer the questions. This is the first time we have done that. Over the last couple of years, we would get to the meeting and you could tell they (the instructors) didn't really spend some time going through [data analysis] with a fine tooth comb. They looked at the end result and that was it. This put a little more responsibility on them to interpret it (data) rather than me tell them, 'Hey, this is what it (the data) is showing you.'

Administrator E mentioned building trust as part of building culture, "I think we build a culture around service to the kids and identifying what they need... and building trust with their staff." Administrator F wanted to make it very clear the value of his district's culture is significant, "We build trust, respect, and we care. We have supports in place all year."

Creating Transparency. For Administrator B and D transparency lies in administration supporting instructors. Administrator B felt, "The most important thing is you have to listen to the teachers, to what their needs are whether they are legitimate or not." Administrator D confidently resounded,

I don't think it's anything that complicated. The number one thing is that you can't have the kids hanging off the lights. We are not very authoritarian; we don't have a lot of discipline issues. The culture starts from the top down. I think it (culture) is built by how the administration treats the staff, modeling. I am very transparent with my staff. I am very collaborative with my staff. I tell my staff... I don't care whose idea it is. It's not about me. It's about listening. All I care about is being successful. I have their back. Everyone contributes to the success—students and staff. They have freedom in their classroom to take risks; we trust them.

Data Based Decisions. Administrator B discussed the value of providing research based trainings to instructors, "Things (professional development) that they (the instructors) come up with that you feel could be useful for future instruction, professional development... that they (the instructor) have some say in that and feel they (the instructor) are helping with whatever needs of the whole district." He continued, "I think that when the teachers feel they are a part of it (planning professional development) they (the instructor) are more willing to be a part of it (professional development) and to improve on it (the provided learning)." He stressed, "The other thing is anything that we can provide research that shows why we are doing what we are doing legitimizes everything that we do."

Administrator C added, "I think the biggest thing (in building buy-in) is what administration looks for. We really have gotten much more targeted in our professional developments across the board. There is a plan that goes year to year to year that provides additional support for the teachers."

Develop a Collective Lens Based on Focus, Coherence, and Rigor. Guiding instructors towards collaborating with colleagues or emulating colleagues was brought up by Administrator C,

In pockets they (the instructors) have seen the value (of data analysis and use) and that may be that they have seen other teachers or some of your star teachers who have used the data, have altered instruction, their students have been successful on state and national tests and so they (the instructors) see it (success).

He added, "We have not made the jump to where they (the instructors) necessarily want to do it, but they see that it (success) can happen and now it is just a matter of are they willing to invest the time and energy themselves."

Administrator I also discussed instructors growing through collaboration, "There have been regular PLCs (Professional Learning Communities) over the past four years that have incorporated data analysis, instructional practices, and the like... teacher led PD (professional development) as well as the PLCs (Professional Learning Communities) have been successful. Our teacher coaches have also played important roles in PD (professional development) throughout the years."

Identify Professional Learning to Inform Decisions. Professional development, good professional development, aligned to curriculum and initiatives had been a goal of assisting with buy-in in many districts.

Administrator C,

I think the first thing we do is we have invested significant dollars in bringing in the experts. We have sought out, when we did trauma informed, we sought out someone from Seattle Washington who is the guru of trauma informed classrooms. When we are getting ready to head into some real work in our English Lit and Writing, we bring in the experts. And with that, all of those experts have stressed reviewing the data to talk about where to go.

In regards to data use he added, "So reviewing the data, whether you are talking about Social Emotion Learning or whether you are talking about academic performance, all of the book studies and authors and presenters and leading experts have talked about the importance of data and student specific data, at that, to be able to effect change moving forward. So I think that we have tried to tie the importance of knowing your students, knowing your students' data, and analyzing your student data, and building relationships with your students so that you understand what is going on as the hub of the wheel and all the spokes that go out incorporate data in some fashion.

Research Question Two

Through the educational leader interview process, a simple major theme emerged answering research question two, "What are the root causes or resistances to valuing local benchmark testing and utilizing benchmark data to drive or alter classroom instruction?" Theme One: Buy-in cannot be forced or mandated. Instructors must 'want to' use local testing resources to benefit student success. Leader input was arranged according to Guarino et al. (2018) *Guiding Principles* necessary for building ownership.

Building Ownership. For Administrator D flexibility prevents resistance and lends in building ownership. He explained individual instructors determine if they want to review testing data and he was not concerned with those instructors who resist benchmark testing or reviewing data, "They (the instructors) review (the data) on their

own. I don't push them on it (data review) at all because I could care less about the scores."

Fostering and Strengthening Trust. Administrator E added to the previous mentioned thought and talked about trusting the judgement of his instructors noting, "What they do with the data is up to them."

Creating Transparency. For administrators G and D building a transparent culture assisted in avoiding resistance. Administrator G reasoned, "You have to show that it (positive culture) is important, you show it as a district goal, dedicate time to it, and dedicate in-servicing ... see administration actively involved in it." He went on to explain, "I think establishing time for it (buy-in)... and the old ways of if you can make it their (the instructors') idea."

Administrator D was clear, "We don't emphasize our test scores ONE BIT. I take a holistic view on it (success), a cultural view on it. We talk about maximizing instructional time. We want to get students ready for life. As I see it, if we are doing all those things, the scores will take care of themselves."

Data Based Decisions. When administrator C was asked, "Do classroom instructors regularly use analyzed data to drive or alter instruction of whole group lessons and/or individual student lessons?" He responded,

No, again, I would say pockets, but it is probably even smaller pockets that actually are adjusting their instruction based on it (data analysis). It is the goal of the district they do so, but in my opinion it is not the goal of the district to force it. The goal of the district is to encourage the want to. Teachers have to want to improve their students by reviewing that data and knowing how to be a better

teacher for the kids in their room. The district can't mandate that. We can mandate the review. We can mandate that it should drive instruction, but teachers have to own wanting to use it to benefit students. It is the self-reflective part of data analysis that we are missing where the teacher realizes that they have, that they are a contributing factor to the success of the students and the classroom as a whole.

Develop a Collective Lens Based on Focus, Coherence, and Rigor. In creating focus, administrator C went on to say, "Teachers review data by force... either their department or grade level meetings is presenting the data and going over it and asking questions about it, or individually the principal has called them aside to say I want to take a look at this." He added, "Too often the teacher sees themselves as something separate from what moves students forward."

Identify Professional Learning to Inform Decisions. Administrator F discussed using professional learning to assist with his challenges of building buy-in at his building level, "The elementary is a challenge to try to get buy-in to our programs. If teachers want to be vested in it (district initiatives), I try to bring in those interested parties.

Whatever we do, I try to support it (district initiatives) with professional development."

He noted, "I try to keep hands off. I don't do walk-throughs. I don't want any 'got you' moments."

Research Question Three

Through the educational leader interview process, three major themes emerged answering research question three, "What programmatic changes to local benchmark testing, data analysis, and review are necessary to increase the significance of these

assessments and data driven instruction?" Theme One: Instructors must be included in the planning and decision making processes. Theme Two: Testing tools must have validity. Theme Three: The value of accurate data must become more transparent. Leader input was arranged according to Guarino et al. (2018) *Guiding Principles* necessary for building ownership.

Building Ownership. Administrator F discussed creating ownership through building relationships and allowing instructors to take risks in the classroom, "We build relationship with kids and teachers. Teachers are allowed to experiment. It is not about what we do but who we are."

Administrator H revealed his greatest strategy this year for building buy-in was consistent follow through and giving instructors a voice, "We also have included our teachers in a professional development team and we are starting to plan that out so they know they are going to be part of the process ... It (professional development) is planned out for the year. In the past there has been no follow up on any professional development."

Fostering and Strengthening Trust. Administrator B strengthened the trust of his instructors by allowing them to determine the value of one benchmark exam over another, "They (the instructors) felt by using the Study Island benchmark they were able to predict the students success based on the results on the benchmark tests (verses an alternate assessment)." Confirming the importance of valuing and utilizing accurate data, recall Administrator A noted he encourages his instructors to voice their needs asserting, "[We facilitate] grade level and department meetings to discuss needs of the teachers that

they would have for their students, what tools they would need whether it be technology or anything along those lines."

Trust for Administrator E evolved through multiple measures of student growth and success, "Test scores are not the end. Test scores are a piece. The end is the holistic education of the students. Growth... and mental health is very important, test scores are minimized."

Creating Transparency. Administrator D talked about the competitive nature of his instructors and the vibrant encouragement he provides, "Our teachers are competitive. Our teachers want to do well. Our teachers want to be the best, but they don't get any pressure from me about that. All I care about is perseverance... If you're going to work hard, you are going to be fine. Anything worth doing is worth doing well."

Data Based Decisions. Administrator D discussed using data to target needed instruction, "Next year we are starting a new class in response to some of the data we have gotten about some of the missing pieces of instruction the kids are not getting."

Administrator A furthered this though noting a misconception of instructors when it comes to the snapshot data provides on each student, "I just think they look at it (data) and say 'I knew that the kid would just score there'... They have a preconceived notion of where the kids are going to fall and [that] they are going to be locked into that level forever." While Administrator C added, "They (the instructors) haven't embraced the self-reflective part or they haven't realized that this data can make me (themselves) better. They haven't made that connection."

Develop a Collective Lens Based on Focus, Coherence, and Rigor. In regards to a collective lens, administrator I looks for validity of data and noted the importance of

using the most accurate predictors, "We have found that some of the tools are better indicators for certain subjects." Instructor B noted a change in instructor viewpoint when the testing platform changed to an exam with greater validity of reported data saying, "They (the instructors) felt by using the Study Island benchmark (verses the previously used benchmark exam) they were able to predict the students' success based on the results on the benchmark tests."

Administrator C talked about making connections between the exam and curricular resources and instruction,

I don't know that we have developed the connection between the test and student success and I don't know that I want to create a connection between the tests and the student success. What I'd like to see is a connection between the test and curricular resource and I'd like to see a connection between the curricular resource and the students' success, curricular resource and classroom instruction, the strategies that we use to help students. I don't want to bridge between those two directly. I think by happenstance we make a bridge between the resource and the instructional strategy and the students' success, and that kind of, by happenstance, makes the connection to testing. But, I am hoping that we never focus on the testing to student success bridge.

Identify Professional Learning to Inform Decisions. Administrator A mentioned making informed decisions and programmatic changes through increased targeted professional learning, "The group data reviews [in grade level or department meetings] is in a sense PD (professional development) on how to read data and interpret

what it is telling us ... but there could be some more targeted PD (professional development) for the teachers."

Administrator C agreed with increasing professional development opportunities specific to benchmark testing and felt his district could "certainly do better" in providing educators supporting professional development to educate instructors in the use of benchmark testing, data analysis, and use of data to drive instruction. He however cautioned and reminded the researcher, "You can only do so much before it (professional development) is overwhelming to teachers." Administrator G also mentioned the importance of providing ample time to the instructors for data analysis of benchmark testing, "[You have to] set aside time. In the past [we] used in-service time for some benchmark."

Discussion

The purpose of this study was to gather information from educational leaders and classroom instructors determining methods to build buy-in to district initiatives, specifically local benchmark testing. The desired result of the district studied was for annual benchmark testing to facilitate analysis of successful instruction, evaluate student learning, and review student growth in real time with immediate and constructive results. This study gathered instructor and administrator perceptions exploring building instructor buy-in to local benchmark testing, defined preexisting resistance to using benchmark testing to cultivate data driven instruction, and developed recommendations for programmatic changes to current practices.

The analysis of the subsequent qualitative data, through categorizing, comparing, and evaluating, will provide substantial research outcomes demonstrating the tools used:

instructor survey, instructor interview, and educational leader interview, will support each other during the process of triangulating and aggregating the emerging themes specific to answering the action research questions.

The results of the Instructor Perceptions of Benchmark Testing in the Elementary and Junior Senior High School Survey noted buy-in to the value and use of benchmark testing was in place by many instructors within this district, many were comfortable in navigating whole class and individual student results and found the data correlated to the curriculum they teach. Instructors indicated a need for increased professional development, increased student value of benchmark exams, and increased opportunities to conference with students discussing benchmark testing results. Students completing the exam seriously was a concern of a large number of instructors and the majority of those instructors agreed conferencing with each students about their benchmark test results would benefit instruction, the teacher, and the student.

The instructor and educational leader interview produced ten and seven themes respectively. The resulting qualitative data of instructor interviews produced the following themes:

Theme One: Buy-in does not occur bilaterally in an organization. Theme Two:
Buy-in can take place only if stakeholders understand the process and purpose of the initiative. Theme Three: Buy-in to benchmark testing was established with greater ease for those valuing the use of data to drive instructor. Theme Four: Instructors were split on whether or not they have received valuable professional development. Theme Five:

Accuracy of test results were questioned based on the importance students place on the exam. Theme Six: Valuable instructional time is lost on administering the exam,

reviewing data, and altering instruction. Theme Seven: Conferencing with students about individual testing progress or growth may add value and meaning of the tests for students and add to the validity of the exam. Theme Eight: Additional professional development is needed on analysis of data and understanding how tests and data align to curriculum. Theme Nine: A quick turnover from student completion of testing to review of analyzed data is imperative. Theme Ten: Students should, in some way, be rewarded for growth on exams. Thoughts on an intrinsic or extrinsic reward system varied greatly.

The resulting qualitative data of educational leader interviews produced the following themes:

Theme One: Buy-in is built through establishing instructor ownership, building trust, and nourishing educator responsibility. Theme Two: Listening, allowing instructor voice and contributions, and creating a 'want-to' aides in developing a culture of buy-in. Theme Three: High-quality professional development must be available, on-going, and aligned to the needs of the district and the wants of the instructors. Theme Four: Buy-in cannot be forced or mandated. Instructors must 'want to' use local testing resources to benefit student success. Theme Five: Instructors must be included in the planning and decision making processes. Theme Six: Testing tools must have validity. Theme Seven: The value of accurate data must become more transparent.

Summary

In this study on fostering buy-in to local benchmark testing it became evident that districts had varied approaches and values to local benchmark testing. Where some use benchmark testing with regularity, others find benchmark testing and data analysis of little value. All districts did agree, however, that it was not about the test or the data itself

but using information gained through the process to facilitate positive learning experiences that will promote student growth and success.

Within the district where instructors were interviewed, there was little overall dissention on the use of benchmark testing. However, these instructors shared thoughts, feelings, and philosophies in areas including student value of the exam, the value of resulting data, and multiple areas of need for professional learning experiences to explore the purpose of the test, alignment to state standards and district curriculum, and use of resulting data to alter or drive classroom instruction.

Chapter Five will discuss research findings through analysis of data collected from fifteen instructors in a single school district along with nine administrators representing four school districts in Central Pennsylvania.

CHAPTER V

Conclusions and Recommendations

In Chapter Five, the analysis and results of data collected in this yearlong action research study are described in relation to building instructor buy-in to local benchmark testing, defining the preexisting resistance to using benchmark testing to cultivate data driven instruction, and developing recommendations for programmatic changes to current testing practices. Conclusions, application for district improvements, and fiscal implications were based on the qualitative research findings, with a small quantitative data component, that evolved in the form of themes associated with the multiple research tools used in the form of instructor surveys, instructor interviews, and educational leader interviews. This data was triangulated using credible and multiple methods categorizing, comparing, evaluating, and collating data sources throughout the study reviewing the evolving and consistent themes of instructor perception, leader insight, and preexisting benchmark testing practices and procedures. Finally, limitations of the study, research design, and external factors impacting the findings are discussed along with recommendations for future direction and follow-up research needed.

This study was motivated by the researcher's interest in developing instructor buy-in specific to district benchmark testing and the analysis and use of testing and results to drive and alter instruction meeting the diverse needs of students prominent to sustained and successful learning experiences.

The studies of Hedges (2015) and Sujitparapitaya (2014) greatly influenced the researcher and the direction of this study. In the area of building buy-in, Hedges (2015) recommends the following stages of developing buy-in. Build buy-in through formulating

a coherent idea or vision but keep it in draft form. He recommends to first present the problem with the objective of convincing others there is a problem that must be addressed. His following stage consists of outlining reform measures and ideas as clearly as possible with "concrete examples to demonstrate how you came to your solution" (Hedges, 2015, Coherent Idea section). Follow with conveying concerns and expressing "where you think this idea may be risky or need some improvement, which will function as a lead-in for others to provide their input (thereby feeling welcomed into the conversation)" (Hedges, 2015, Coherent Idea section), and he recommends exposing the idea to outside criticism and acknowledging the criticism. Hedges' (2015) remaining stages of building buy-in move to leveraging others' feedback for improvement to achieve your end goal, and finally, communicating your progress keeping contributors to the idea process updated.

Sujitparapitaya (2014) maintained the following areas are essential when building buy-in and increasing the motivation and performance of faculty. He recommended helping faculty members develop self-confidence in their student learning outcome assessment skills and knowledge by regularly understanding the concerns faculty members may have, the importance of "helping faculty develop self-confidence in their assessment skills, the training sessions, best practices, and other supporting materials need[ed] to be offered and easily accessed" (Sujitparapitaya, 2014, p. 9).

He goes on to suggest removing unnecessary policies, procedures and existing barriers. Additionally, removal of "unnecessary, arbitrary institutional policy and procedural barriers" (Sujitparapitaya, 2014, p. 9) is noted as a key factor in reducing resistance to motivation, performance, and buy-in, and he suggests supporting the

development of strong interest value by making a connection between performance goals and instructor individual interest and promoting an environment that supports personal importance value. Sujitparapitaya's (2014) final recommendation is to develop incentive programs that support personal value.

Conclusions

Although findings of this research study did not stand alone in respect to the three independent research questions (RQ), for organizational purposes, conclusions are reported relevant to the questions that guided this study:

- 1. How do educational leaders foster and build instructor buy-in to improvement initiatives? (RQ 1)
- 2. What are the root causes or resistances to valuing local benchmark testing and utilizing benchmark data to drive or alter classroom instruction? (RQ 2)
- 3. What programmatic changes to local benchmark testing, data analysis, and review are necessary to increase the significance of these assessments and data driven instruction? (RQ 3)

Through the process of triangulating the qualitative data of instructor surveys and instructor and educational leader interviews the following results, patterns, and themes were established for each research tool used. Table 10 displays survey results and patterns in the areas of opinions of benchmark testing practices and data analysis, individual use of benchmark data to drive, alter, and/or improve classroom practices, value of professional development provided by the district in regards to benchmark testing and data analysis, and student value of benchmark testing. Additionally displayed

are the correlating research question(s) to each result and/or pattern and the percentage of instructors supporting each outcome.

Table 10

Results and Patterns of Instructor Perceptions of Benchmark Testing in the Elementary and Junior Senior High School: Survey

Instructor Survey Results and Patterns	Correlating Research Question	Participants Supporting Each Outcome	
Buy-in to the value and use of benchmark testing was in place by many instructors within this district.	RQ 1 and RQ 2	80%	
Many instructors were comfortable in navigating whole class and individual student results and found the data correlated to the curriculum they teach.	RQ 2	77%	
Instructors indicated a need for increased professional development.	* RUTANGRUA		
Instructors indicated a need to increase student value of benchmark exams.	RQ 3	80%	
Instructors indicated a need for increased opportunities to conference with students discussing benchmark testing results.	RQ 3	60%	
Students completing the exam seriously was a concern by a large number of instructors.	RQ 2	67%	
Conferencing with each student about their benchmark test results would benefit instruction, the teacher, and the student.	RQ 3	60%	

Table 11 displays instructor interview themes and patterns in the areas of opinions of benchmark testing practices and data analysis, individual use of benchmark data to drive, alter, and/or improve classroom practices, value of professional development provided by the district in regards to benchmark testing and data analysis, student value of benchmark testing, and suggestions for improvement of benchmark testing practices. Additionally displayed are the correlating research question(s) to each theme and the percentage of instructors who discussed, cited, and/or mentioned viewpoints and philosophies that assisted in developing each theme.

Table 11

Themes and Patterns of Instructor Perceptions of Benchmark Testing in the Elementary and Junior Senior High School: Interview

Instructor Interview Themes and Patterns		Correlating Research Question	Participants Contributing To Theme
Theme One	Buy-in does not occur bilaterally in an organization.	RQ 1	58%
Theme Two	Buy-in can take place only if stakeholders understand the process and purpose of the initiative.	RQ 1	58%
Theme Three	Buy-in to benchmark testing was established with greater ease for those valuing the use of data to drive instructor.	RQ I	50%
Theme Four	Instructors were split on whether or not they have received valuable professional development (PD).	RQ 2 and RQ 3	33% Had PD 17% Unsure 50% Had No PD
Theme Five	Accuracy of test results were questioned based on the importance students place on the exam.	RQ 2	75%
Theme Six	Valuable instructional time is lost on administering the exam, reviewing data, and altering instruction.	RQ 2	42%
Theme Seven	Conferencing with students about individual testing progress or growth may add value and meaning of the tests for students and add to the validity of the exam.	RQ 3	50%
Theme Eight	Additional professional development is needed on analysis of data and understanding how tests and data align to curriculum.	RQ 3	83%
Theme Nine	A quick turnover from student completion of testing to review of analyzed data is imperative.	RQ 3	42%
Theme Ten	Students should, in some way, be rewarded for growth on exams. Thoughts on an intrinsic or extrinsic reward system varied greatly.	RQ 3	58%

Table 12 displays educational leader themes and patterns in the areas of use of benchmark testing and data analysis in the district, instructors value and use of testing and data, district practices in building connections between benchmark testing and student success, district use of professional development to support benchmark testing practices and data analysis, and building buy-in and creating a positive culture around benchmark testing. Additionally displayed are the correlating research question(s) to each theme and the percentage of educational leaders who discussed, cited, and/or mentioned viewpoints and philosophies that assisted in developing each theme.

Table 12

Themes and Patterns of Educational Leader Practices Used to Foster and Build

Instructor Buy In to School Improvement Initiatives: Interview

	Educational Leaders Interview Themes and Patterns	Corresponding Research Question	Participants Contributing To Theme
Theme One	Buy-in is built through establishing instructor ownership, building trust, and nourishing educator responsibility.	RQ 1	78%
Theme Two	Listening, allowing instructor voice and contributions, and creating a 'want-to' aides in developing a culture of buy-in.	RQ 1	44%
Theme Three	High-quality professional development must be available, on-going, and aligned to the needs of the district and the wants of the instructors.	RQ 3	56%
Theme Four	Buy-in cannot be forced or mandated. Instructors must 'want to' use local testing resources to benefit student success.	RQ 1	56%
Theme Five	Instructors must be included in the planning and decision making processes.	RQ 1	56%
Theme Six	Testing tools must have validity.	RQ 2 and RQ 3	56%
Theme Seven	The value of accurate data must become more transparent	RQ 2 and RQ 3	33%

Research Question One Conclusions

The previous results, themes, and patterns from surveys and interviews of educational leaders and classroom instructors were categorized, compared, evaluated, and collated establishing consistent conclusions answering research question one, "How do educational leaders foster and build instructor buy-in to improvement initiatives?" Study results indicated buy-in cannot be forced or mandated, instructors must 'want to' share in and contribute to district improvement initiatives. Additionally buy-in does not occur bilaterally in an organization and must be fostered through establishing instructor ownership, building trust, and nourishing educator responsibility. The 'want to' culture must be fostered by allowing instructor voice and contributions in the planning and decision making processes. High-quality and on-going professional development is needed to develop value of the initiative and an understanding of the initiative process and purpose.

Hedges' (2015) research supports these conclusions mentioning building buy-in through leveraging others' feedback for improvement to achieve your end goal and continuing to acknowledge others' opinions with the thought of using the provided feedback to improve the initial plan. "You can use their feedback to improve upon your initial idea and include them as players in the process". [The message to remember is to not force] "your idea; you are trying to work together for the benefit of the organization as a whole" (Hedges, 2015, Leverage Feedback section).

Research Question Two Conclusions

The following conclusions emerged through the repeated process of categorizing, comparing, evaluating, and collating results, themes, and patterns from surveys and

interviews of educational leaders and classroom instructors establishing consistent conclusions answering research question two, "What are the root causes or resistances to valuing local benchmark testing and utilizing benchmark data to drive or alter classroom instruction?" Study results indicated root causes or resistances to the use of benchmark testing and data analysis are in direct relationship to the lack of value on behalf of instructors to the testing and data analysis processes used to drive or alter instruction.

Lack of value emerged in the form of feeling instructional time is lost on administering the exam, reviewing data, and altering instruction and believing inadequate and grossly underdeveloped professional development has been provided in understanding the testing, data analysis, and application of aligning results to curriculum standards and classroom lessons. Furthermore, student lack of value during testing procedures created questions regarding the accuracy and validity of test results. Instructor K contributed the pertinent response of:

The problem [is] we are still guessing at the accuracy of the testing because of the lack of seriousness at which the students take it. We are not always sure should we spend all this time going back and reteaching this or that. Do the kids not know it or are they not trying? Could that time be better off to go on and work on something new or something maybe they really don't know? We are guessing when looking at the data. Is this accurate data and should we use this to drive so much of what we do? Is it worth taking a lot of time to go back and reteach [curriculum] maybe we think they should already know and sacrifice something new or something that they don't have that much experience with?

The research of Sujitparapitaya (2014) supports the preceding conclusions suggesting supporting the development of value by making a connection between performance goals and instructor individual interest and promoting an environment that supports personal importance value. "The connections between performance goal and individual's special abilities must be established by recognizing that they are 'good at this type of assignment' and this is their 'opportunity to show their skills and knowledge'" (Sujitparapitaya, 2014, p. 9). He goes on to encourage the establishment of value focusing on ensuring instructors know the benefits of accomplishing the goal.

Research Question Three Conclusions

The following conclusions emerged through the repeated process of categorizing, comparing, evaluating, and collating results, themes, and patterns from surveys and interviews of educational leaders and classroom instructors establishing consistent conclusions answering research question three, "What programmatic changes to local benchmark testing, data analysis, and review are necessary to increase the significance of these assessments and data driven instruction?" Study results indicated changes are needed and necessary in the areas of high-quality professional development aligned to the needs of the district and wants of the instructors. Data analysis must become more timely allowing for a quick turnover of analysis to application to classroom curriculum. Much guidance is needed in the form of professional development in understanding the alignment of benchmark testing to classroom curriculum specific to the needs of altering instruction. Student value of testing must be established. The consensus of instructors felt student value of testing could be created through teacher-student conferencing but adequate time for conferencing must be facilitated through the district and additional

training is needed in interpretation of the data for valid and accurate conferencing that would lead to student-developed goals. Supporting students through informed conferencing and goal setting is comparative to Hedges *productive inquiry* technique:

This kind of inquiry is more than knowing what questions to ask and learning how to ask them skillfully. Productive inquiry is a method of engagement, a way to be present with yourself and with others. Attentiveness and genuine curiosity are your most important tools if you wish to inquire effectively - that, and the willingness to really listen to the other person. The ultimate goal here is mutual understanding. (Hedges, 2015, Coherent Idea section)

Application for District Improvements

Although the focus of this study was in developing buy-in specific to district benchmark testing, the researcher broadened the overall practice of buy-in to include the culture of buy-in to all district initiatives. Buy-in to district initiatives requires the involvement of district stakeholders. Creating the 'want to' culture within the district must be facilitated through establishing instructor ownership and trust through encouraging instructor contribution to initiatives, creating teacher leadership, and nourishing educator responsibility. The 'want to' culture must be fostered by allowing instructor voice and contributions in the planning and decision making processes. High-quality and on-going professional development is needed to develop value and understand the process and purpose of each initiative. Hedges (2015) endorses taking interest in others' opinions and thoughts, asking questions looking for components of the plan that may be missing and acknowledging areas that can be made stronger.

Eliminating root causes or resistances to the use of benchmark testing and data analysis must occur through increasing the value of the exam through professional development designed to increase the instructors' knowledge of the testing and data analysis processes used to drive or alter instruction. An equally important necessity for professional development is needed in understanding the application of aligning test results to curriculum standards and classroom lessons. In addition to this needed professional development, sufficient and constructive time must be allotted for the processes of reviewing and understanding data along with planning and altering instruction. Sujitparapitaya's (2014) research suggested avoiding the aforementioned root causes and resistances can occur through increasing the motivation and performance of faculty through helping faculty members develop self-confidence in their student learning outcome assessment skills and knowledge by regularly understanding the concerns faculty members may have, the importance of "helping faculty develop self-confidence in their assessment skills, the training sessions, best practices, and other supporting materials need to be offered and easily accessed" (Sujitparapitaya, 2014, p. 9).

Finally, student value of testing must be established. Instructors feel student value of testing could be created through teacher-student conferencing but adequate time for conferencing must be facilitated regularly through the district. Additionally, high-quality training is needed in interpretation of the data for valid and accurate conferencing that will lead to student-developed goals.

Fiscal Implications

Early in the research process the researcher hypothesized many instructors would blame the lack of benchmark data utilization on not having time to review and analyze data. Additional hypotheses included instructors having a need for professional development in understanding the testing platform used, knowing how to analyze and interpret the generated data, and fully understanding the relationship of tested materials to taught curriculum. A final hypothesis included a need for increased understanding on how to facilitate changes to instructional practices to bring about desired and improved student success.

As theorized, the aforementioned hypotheses are indeed focus areas needed for district improvements to fostering buy-in specific to benchmark testing and utilizing testing to drive and alter instruction facilitating sustained learning and student success.

Specific to benchmark testing, professional development in understanding testing procedures and practices is needed. The professional development must be quality-based and provided by the creators of the benchmark exam, for the purpose of this study, Edmentum. Use of the on-site instructional coach to provide relevant research-based instruction aligning benchmark data to curriculum taught in classrooms will be at no cost to the district. Included in the hypothesized areas of focus was a book study implementing learning targets in the classroom specific to assisting instructors with becoming more familiar with taught content area. This tool remains in the direct cost analysis but only as optional and/or 'next step'. Based on the abundance of discussed professional development needs, this initiative may have to be a phase two plan in a following school year. Finally, an indirect cost in the area of time will be needed for professional development and teacher-student conferencing. It will be necessary to allot time for professional development specific to benchmark testing and data analysis to district in-servicing days. Additional time must be planned while students are on site

when teacher-student conferencing can take place. Direct and indirect costs are depicted in Table 13.

Table 13Fiscal Implications for District Improvements

PRODUCT	PROVIDER	COST TO DISTRICT
Electronic Benchmark Testing Exams Grades Three through Eight	Edmentum	\$1900.00
Professional Development Specific to Benchmark Testing and Data Analysis	Edmentum	No Cost Part of Edmentum Bundle
Professional Development Specific to Aligning Benchmark Data to Taught Curriculum	On-Site Instructional Coach	No Cost
Learning Target Book Study All Instructors K-12	ASCD	\$3600.00
Substitute Fees Covering Teacher-Student Conferencing	Source4Teachers	\$110 per substitute Four Roving Substitutes HS Four Roving Substitutes Elem Three Days Annually \$880 X 3= \$2,640

Limitations

Limitations discussed relate specifically to the research questions of this study and are relevant to sample size, measures used to collect the data, and longitudinal effects.

Sample Size

Determining adequate sample size in qualitative research is ultimately a matter of judgment and experience in evaluating the quality of the information collected against the uses to which it will be applied and the particular research method and purposeful sampling strategy employed.

(Sacred Heart University: Library, 2020)

The sample size of this study, both numbers of instructor and educational leader participants, cannot be fully adequate with the limitation of this action research study being instructors representing just a single school district while educational leaders represented multiple districts. Recommendations for future research will further explore collating, comparing, and breaking data down to even smaller focus groups looking for commonalities and patterns of instructor perception equated to district administration thoughts and practices in multiple districts.

Measures Used to Collect Data

Sometimes ..., after completing your interpretation of the findings, you discover that the way in which you gathered data inhibited your ability to conduct a thorough analysis of the results. For example, you regret not including a specific question in a survey that, in retrospect, could have helped address a particular issue that emerged later in the study. (Sacred Heart University: Library, 2020)

The researcher selected to use a semi-structured interview process following a set of predetermined questions during the instructor and district leader interviews. This process only allowed straying from initial questions for elaboration or clarification. In following this method, the researcher could not explore the reoccurring instructor views and opinions specific to the process of teacher-student conferencing and student-developed goals beyond the underdeveloped elaborations that occurred during the scripted interview process.

Longitudinal Effects

This study occurred in the 2020-2021 school year during the COVID 19 pandemic. Although the district studied continued the practice of benchmark testing, the

Pennsylvania System of School Assessments (PSSA) testing did not occur in the previous spring of 2020 due to the COVID-related forced school closure. Additionally, the Pennsylvania Department of Education, while resuming the administration of PSSA testing during the 2020-2021 school year, opted not to use the resulting data to formulate either individual professional employees' evaluations or as part of the PA Future Ready Index, a collection of school progress measures rating the success of school districts across Pennsylvania. The researcher must question if educational leader and/or classroom instructor opinions and value of interim exams were skewed as a result of state testing carrying little to no weight during this researched year.

Recommendations for Future Research

The following suggestions are recommended for future research. Sample size should include instructors and administrators from multiple districts. Data from multiple districts would facilitate the comparison and collation of smaller focus groups within the study comparing buy-in and benchmark testing philosophies one district to the next.

The semi-structured interview process should include seeking prior approval in allowing for the incorporation of additional questions relevant to emerging and unexpected themes.

It is of great interest to follow up with instructors and educational leader participants post COVID 19 state testing pause to PSSA reporting methods inquiring if philosophies change or remain the same when educators and individual districts return to being ranked and/or scored based on state testing results.

Considering the recommendations for future research, the resulting follow-up questions emerged: Do instructors echo or reverberate district leader philosophies in

respect to local benchmark testing practices and values within individual districts? Will the educational leader philosophy of discounting local benchmark testing and resulting data analysis of several districts studied changed as state testing is once again utilized to measure district success following the COVID pandemic stall in state testing practices and use of state testing results?

Summary

Chapter Five has presented a conclusion to the action research study in a school district seeking to determine approaches needed to build instructor buy-in to district initiatives, define the preexisting resistance to using benchmark testing to cultivate data driven instruction, and develop recommendations for programmatic changes to current benchmark testing practices. Additionally, the goal of this action research study was to build instructors' belief that "fixed interim assessments could be a critical tool to help evaluate student progress toward meeting grade-level state standards" (Edmentum, 2015).

Analysis of data collected in this qualitative research study, with a small quantitative data component, indicated buy-in to district initiatives requires the involvement of district stakeholders. Creating the 'want to' culture within the district must be facilitated through establishing instructor ownership and trust through encouraging instructor contribution to initiatives, creating teacher leadership, and nourishing educator responsibility. The 'want to' culture must be fostered by allowing instructor voice and contributions in the planning and decision making processes. High-quality and on-going professional development is needed to develop value and understand the process and purpose of each initiative.

Eliminating root causes or resistances to the use of benchmark testing and data analysis must occur through increasing the value of the exam through professional development designed to increase the instructors' knowledge of the testing and data analysis processes used to drive or alter instruction. An equally important need for professional development is needed in understanding the application of aligning test results to curriculum standards and classroom lessons. In addition to this needed professional development, sufficient and constructive time must be allotted for the processes of reviewing and understanding data along with planning and altering instruction.

Finally, student value of testing must be established. Instructors felt student value of testing could be created through teacher-student conferencing but adequate time for conferencing must be facilitated regularly through the district. Additionally, high-quality training is needed in interpretation of the data for valid and accurate conferencing that will lead to student-developed goals.

This action research study revealed approaches needed to build instructor buy-in to district initiatives, defined the preexisting resistance to using benchmark testing to cultivate data driven instruction, and developed recommendations for programmatic changes to current benchmark testing practices.

References

- Abrams, L. M., McMillan, J. H., & Wetzel, A. P. (2015). Implementing benchmark testing for formative purposes: Teacher voices about what works. *Educational Assessment Evaluation and Accountability*, 27, 347-375.
- Angelle, P. S. (2017). Leading authentically: A new principal in challenging circumstances. Reasearch in Educational Administration & Leadership, 2(1), 10-27.
- Baker, E. L., & Herman, J. L. (2005). Making benchmark testing work: Six criteria can help educators use benchmark tests to judge student skills and to target areas for improvement. *Educational Leadership* 63(3), 48-54.
- Barth, R. S. (2006). Improving relationships within the schoolhouse. ASCD, 63(6), 8-13.
- Bhandari, P. (2020, June 19). *An introduction to qualitative research*. Scribbr https://www.scribbr.com/methodology/qualitative-research/#:~:text=Qualitative%20research%20involves%20collecting%20and,gen erate%20new%20ideas%20for%20research.
- Bryk, A. S., & Schneider, B. (2003). Trust in schools: A core resource for school reform.

 Association for Supervision and Curriculum Development, 60(6), 40-45.
- Cheng, C.-C., & Huang, K.-H. (2018). Education reform and teacher agency. *Problems of Education in the 21st Century*, 76(3), 286-287.
- Contartesi, R. A. (2010). School climate: A correlational analysis of superintendent leadership communication and employee performance. Proquest LLC.
- dwe Minor, E., Desimone, L., Caines Lee, J., & Hochberg, E. D. (2016). Insights on how to shape teacher learning policy: The role of teacher content knowledge in

- explaining differential effects of professional development. *Education Policy*Analysis Archives 24(61), 1-34.
- Dweck, C. S. (2016). Mindset: The new psychology of success. Random House.
- Edmentum. (2017). Classroom assessments. Edmentum.com

 https://www.edmentum.com/sites/edmentum.com/files/resource/media/AC04404%20Formative%20Assesment%20Flyer.pdf
- Eisenstat, R., Spector, B., & Beer, M. (1990, November-December). Why change programs don't produce change. *Harvard Business Review*, https://hbr.org/1990/11/why-change-programs-dont-produce-change
- Guarino, J., Cerrahoglu, V., Drake, J., & Weisskirk, L. (2018). Beyond buy-in. *The Learning Professional*, 39(6), 30-34.
- Hedges, K. (2015, March 16). How to get real buy-in for your idea. *Forbes*. https://www.forbes.com/sites/work-in-progress/2015/03/16/how-to-get-real-buy-in-for-your-idea/?sh=457125a64044
- Hendricks, C. C. (2017). *Improvong schools through action research: A reflective practice approach.* Pearson Education.
- Heritage, M., Kim, J., Vendlinski, T. P., & Herman, J. L. (2008). From evidence to action: A seamless process in formative assessment? National Center for Research on Evaluation, Standards, and Student Testing.
- Herman, J. L., Osmundson, E., & Dietel, R. (2010). Benchmark assessment for improved learning. The Regents of the University of California.
- Herman, J., Osmundson, E., Dai, Y., Ringstaff, C., & Timms, M. (2011). Relationships between teacher knowledge, assessment, assessment practices, and learning:

- Chicken, egg, or omelet. National Center for Research on Evaluation, Standards, and Student Testing.
- Kahlenberg, R. D., & Potter, H. (2015). Why teacher voice matters. *American Educator*, 30(4), 6-7.
- Lovelace, N. (2019). Formal teacher leaders and informal teacher leaders and their influence on school culture. ProQuest.
- LSU Online and Continuing Education. (2020, Jube 11). How educators can use student

 data to drive instruction. LSU Online and Continuing Education

 https://online.lsu.edu/newsroom/articles/how-educators-can-use-student-datadrive-instruction/
- Merriam-Webster. (n.d.). Buy-in. In *Merriam-Webster.com dictionary*. Retrieved July 10, 2021 from https://www.merriam-webster.com/dictionary/buy-in
- Moss, C. M., & Brookhart, S. M. (2012). Learning targets. ASCD.
- Niemi, D., Vallone, J., Wang, J., & Griffin, N. (2007). Recommendations for building a valid benchmark assessment system: Interim report to the jackson public schools.

 The Regents of the University of California.
- Popham, W. J. (2017). Classroom assessment: What teachers need to know. Pearson Education, Inc.
- Quaglia, R. J., & Lande, L. L. (2017). Teacher voice: Amplifying success. Corwin.
- Sacred Heart University: Library. (2020). Organizing academic research papers

 Limitations of the study
 - https://library.sacredheart.edu/c.php?g=29803&p=185934

- Setwong, R., & Prasertcharoensuk, T. (2013). The influence of instructional leadership of school administrators on school effectiveness. *Procedia Social and Behavioral Sciences*, 106, 2859-2865.
- Shah, M. (2012). The importance and benefits of teacher collegiality in schools: A literature review. *Procedia Social and Behavioaral Sciences*, 46, 1242-1246.
- Sirisookslip, S., Ariratana, W., & Ngang, T. K. (2015). The impact of leadership styles of school administrators on affecting teacher effectiveness. *Procedia Social and Behavioral Sciences*, 186, 1031-1037.
- Sujitparapitaya, S. (2014). Achieving faculty buy-in: Motivation performance in learning outcome assessment. *Journal of Case Studies in Accreditation and Assessment*, 3, 1-22.
- Svinicki, M. D., Williams, K., Rackley, K., Sanders, A. J., & Pine, L. (2016). Factors associated with faculty use of student data for instructional improvement.

 International Journal for Scholarship of Teaching and Leading, 10(2).
- Trombly, C. E. (2014). Schools and compexity. *Complicity: An International Journal of Complexity and Education*, 11(2), 40-58.
- Wald, P. J., & Castleberry, M. S. (2000). Educators as learners: Creating a professional learning community in your school. Association for Supervision and Curriculum Development.
- Whitaker, T., Whitaker, B., & Lumpa, D. (2013). Motivating and inspiring teachers: The educational leaders' guide for building morale. Routledge.
- Woods, D. M. (2020). Using goal setting assignments to promote a growth minset in IT students. *Information Systems Education Journal (ISEDJ)*, 18(4), 4-11.

APPENDICES

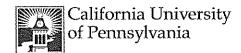
Appendix ADistrict Letter of Support

łuły 29, 2020
Mrs. Tracle Tomasko
Dear Mrs. Tomasko:
I am pleased to write a letter in support of your doctoral capstone project entitled, "Fostering Instructor Buy Into Local Benchmark Testing and Utilization of Benchmark Data to Drive Instruction". The proposed research has significant value in developing a better understanding of instructor perceptions and use of benchmark testing in the School District, providing insight for building instructor by in, and the potential to contribute recommendations for improvements to future testing practices and procedures.
I have reviewed the project proposal and understand the following related to participation:
 Teacher participation involves completion of perception surveys and interviews.
 Participation will be voluntary, and teachers may withdraw from the study at any time.
 Data collected will be kept confidential and kept secure via electronic files.
 Potential risks are minimal and include uneasiness or feeling uncomfortable in answering survey or interview questions as some individuals do not like to volunteer information/feedback that could be perceived as negative or complaining.
Please accept this letter as my formal consent and support of District's participation in the proposed research project.
Sincerely,
Superinteisdent of Schools

Appendix B

Informed Participant Consent: District Instructors

Instructor Participant Invitation and Information Letter



Dear	rac.	.14	14000	har
Dear	1.301	HIV	ıvıem	ner

As a contracted educational professional at the _______ Elementary or Jr Sr High School, you are being asked to participate in a research study of Fostering Instructor Buy In to Local Benchmark Testing and Utilization of Benchmark Data to Drive Instruction.

Your participation in this study will help the researcher learn more about how you perceive Benchmark Testing and has the potential to influence programmatic changes to benchmarking practices.

What will I be asked to do if I take part in this study?

If you agree to participate in this study, you will be asked to (1) complete one Google Form electronic survey questionnaire and (2) participate in one interview.

The interview will ask you questions about your experience with benchmark testing, your familiarity with analyzing benchmark testing data, your use of testing to drive or alter instruction, and your perception of the value of benchmark testing in core tested subject areas.

Where will this study take place?

The survey will be available via an online survey tool (Google Forms) using a secure website. Interviews will occur in the teacher's classroom, researcher's office, or conference room.

How long will the study last?

The study is projected to last approximately nine months with the survey taking each participant *five to ten minutes* to complete with an additional *thirty minute* interview.

What happens if I don't want to participate?

Your participation is voluntary; you can choose whether you want to participate in the study or not. There will be no penalty if you choose not to participate.

Can I quit the study before it ends?

You can withdraw from the study at any point by notifying the researcher. There will be no penalty should you choose to withdraw. The researcher will not ask you why you opted to withdraw.

What are the risks?

There are minimal risks to this study. You will not be asked questions of a sensitive nature. The survey and interview questions may make you feel uncomfortable as some people do not like to volunteer information/feedback that could be perceived as negative or complaining. However, participants are reminded that they are not required to answer any questions of which they choose. Participants can also stop their participation at any time without question.

How will I benefit from participating?

If you decide to be in this study, you will assist the researcher in better understanding the current perceptions and use of benchmark testing in the Elementary and Jr Sr High School and may see improvements to future testing practices and procedures.

Will my responses be kept confidential and private?

Yes, the survey data and interview responses collected from you will be kept confidential, which means only the researcher will see or have access to it. Your survey responses will be anonymous. No names will be reported in the report of the findings. Data will be stored on a secure server and password-protected and/or stored in a locked office.

Who do I contact if I have questions about this study?

If you have questions about this study, please contact the researcher, Tracie Tomasko, at tom1826@calu.edu or at 814-592-5147. If you would like to speak with someone other than the researcher, please contact Dr. Mary Wolf, Assistant Professor at California University of Pennsylvania, at wolf@calu.edu.

Fracie S. Tomaska

Consent Form: Fostering Instructor Buy In to Local Benchmark Testing and Utilization of Benchmark Data to Drive Instruction

I have read this form. Any questions I have about participating in this study have been answered. I agree to take part in this study, and I understand that taking part is voluntary. I do not have to take part if I do not wish to do so. I can stop at any time for any reason. If I choose to stop, no one will ask me why.

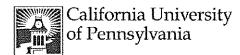
By signing below, I agree to participate in this study. By doing so, I am indicating that I have read this form and have had my questions answered. I understand that it is my choice to participate and I can stop at any time.

Signature:					
Date:					

Appendix C

Informed Participant Consent: Educational Leaders

Educational Leaders Participant Invitation and Information Letter



Dear Administrator,

As an educational leader you are being asked to participate in a research study of Fostering Instructor Buy In to Local Benchmark Testing and Utilization of Benchmark Data to Drive Instruction.

Your participation in this study will help the researcher learn more about positive opportunities you implement to develop a constructive culture using local benchmark testing to drive or alter instruction within your school/district.

What will I be asked to do if I take part in this study?

If you agree to participate in this study, you will be asked to participate in one interview with the researcher.

The interview will ask you questions about your experience with benchmark testing in your school/district, use of benchmark testing by instructors in your school/district, perception of benchmark testing by instructors in your school/district, and positive opportunities you implement to develop a constructive culture using local benchmark testing to drive or alter instruction within your school/district.

There will this study take place?

The interview can take place virtually or face to face at you building at a time that best accommodates your schedule.

How long will the study last?

The study is projected to last approximately nine months with the interview taking each participant *thirty to forty-five minutes* to complete.

What happens if I don't want to participate?

Your participation is voluntary; you can choose whether you want to participate in the study or not. There will be no penalty if you choose not to participate.

Can I quit the study before it ends?

You can withdraw from the study at any point by notifying the researcher. There will be no penalty should you choose to withdraw. The researcher will not ask you why you opted to withdraw.

What are the risks?

There are minimal risks to this study. You will not be asked questions of a sensitive nature. The interview questions may make you feel uncomfortable as some people do not like to volunteer information that could be perceived as negative or complaining. However, participants are reminded that they are not required to answer any questions of which they choose. Participants can also stop their participation at any time without question.

How will I benefit from participating?

If you decide to be in this study, you will assist the researcher in better understanding building instructor buy in, creating positive school improvement opportunities, and developing a constructive school culture.

Will my responses be kept confidential and private?

Yes, the interview responses collected from you will be kept confidential, which means only the researcher will see or have access to it. Your survey responses will be anonymous. No names will be reported in the report of the findings. Data will be stored on a secure server and password-protected and/or stored in a locked office.

Who do I contact if I have questions about this study?

If you have questions about this study, please contact the researcher, Tracie Tomasko, at tom1826@calu.edu or at 814-592-5147. If you would like to speak with someone other than the researcher, please contact Dr. Mary Wolf, Assistant Professor at California University of Pennsylvania, at wolf@calu.edu.

Tracie S. Tomasko

Consent Form: Fostering Instructor Buy In to Local Benchmark Testing and Utilization of Benchmark Data to Drive Instruction

I have read this form. Any questions I have about participating in this study have been answered. I agree to take part in this study, and I understand that taking part is voluntary. I do not have to take part if I do not wish to do so. I can stop at any time for any reason. If I choose to stop, no one will ask me why.

By signing below, I agree to participate in this study. By doing so, I am indicating that I have read this form and have had my questions answered. I understand that it is my choice to participate and I can stop at any time.

Signature:		
Date:		

Appendix D

California University of Pennsylvania Institutional Review Board Approval

Institutional Review Board
California University of Pennsylvania
Morgan Hall, 310
250 University Avenue
California, PA 15419
instreviewboard@calu.edu
Melissa Sovak, Ph.D.

Dear Tracie,

Please consider this email as official notification that your proposal titled "Fostering Instructor Buy In to Local Benchmark Testing and Utilization of Benchmark Data to Drive Instruction" (Proposal #19-087) has been approved by the California University of Pennsylvania Institutional Review Board as submitted.

The effective date of approval is 9/10/20 and the expiration date is 9/09/21. These dates must appear on the consent form.

Please note that Federal Policy requires that you notify the IRB promptly regarding any of the following:

- (1) Any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented)
- (2) Any events that affect the safety or well-being of subjects
- (3) Any modifications of your study or other responses that are necessitated by any events reported in (2).
- (4) To continue your research beyond the approval expiration date of 9/09/21 you must file additional information to be considered for continuing review. Please contact instreviewboard@calu.edu

Please notify the Board when data collection is complete.

Regards,

Melissa Sovak, PhD. Chair, Institutional Review Board

Appendix E

District Leader Interview

Educational Leader Practices Used to Foster and Build Instructor Buy In to School Improvement Initiatives: Interview

- 1. Does your school or district administer local benchmark testing to state tested students/grade levels?
- 2. Do classroom instructors review resulting data of local benchmark testing?
- 3. Do classroom instructors regularly use analyzed data to drive or alter instruction of whole group lessons and/or individual student lessons?
- 4. Do classroom instructors value local benchmark testing and resulting data as a tool to assist in improving student success?
- 5. How has your school/district developed a connection between these tests and student success?
- 6. Does your school/district have supporting professional development in place to educate instructors in the use of benchmark testing, data analysis, and use of data to drive instruction?
- 7. What steps did your school/district take to build a positive culture around administering these exams and regularly using the generated data in daily lessons?
- 8. What strategy have you found to be most effective to build instructor buy in whether it be in improving instructional techniques or any school initiative?

Appendix F

Likert Scale Instructor Survey

Instructor Perceptions of Benchmark Testing in the Elementary and Jr Sr High School: Survey

		STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
	QUESTIONS	5	4	3	2	1
1	Benchmark Testing that occurs quarterly or three times annually lends value to preparing students for PSSA testing.					
2	Benchmark Testing that occurs quarterly or three times annually benefits my classroom practices in driving or altering instruction.					
3	Benchmark Testing that occurs quarterly or three times annually gives me usable information to assist in differentiating instruction.					
4	I have had clear professional development on understanding data attained through Benchmark Testing.					
5	I can easily navigate Benchmark Data to review whole class results.					
6	I can easily navigate Benchmark Data to review individual student results.					
7	I am confident in my skills to analyze available data and understand its correlation to curriculum I am teaching.					
8	Students understand the importance of Benchmark Testing.					
9	Students complete Benchmark Testing in a serious manner.					
10	Conferencing with each student about their Benchmark Testing results would benefit instruction, the teacher, and the student.		V		,	

Appendix G

Instructor Interview

Instructor Perceptions of Benchmark Testing in the Elementary and Jr Sr High School: Interview

- 1. Do you feel there is value to the local benchmark testing that occurs three to four times annually?
- 2. Have you noticed first hand any correlation between local benchmark testing and student scores on annual state testing?
- 3. Do you easily understand how to locate and read local benchmark testing results/data?
- 4. Do you believe local benchmark testing data provides useful information that can be used to benefit your classroom by driving or altering classroom instruction?
- 5. How often, if ever, have you reviewed local benchmark testing data with the purpose of designing or altering classroom lessons?
- 6. If you have used local benchmark testing to design or alter classroom lessons, would you rate this experience as a success in improving instruction?
- 7. Have you been, at any time while teaching in the district, provided professional development that:
 - Explains the goals of benchmark testing?
 - Shows the correlation between benchmark testing and PA Core Standards taught in your curriculum area?
 - Demonstrates how to analyze generated benchmark testing data?
 - Demonstrates review of whole class data?
 - Demonstrates review of individual student data?
- 8. Would you like to participate in professional development focusing on the areas previously discussed? Is there any specific or additional area of interest in regards to benchmark testing?
- 9. Do students take the exams seriously and/or understand the importance of the exams?
- 10. What do you feel would/could produce student value of the exams?
- 11. What suggestions or changes would you make to the local Benchmark Testing practices?