

**BELIEFS AND PRACTICES OF PROVIDING FORMATIVE FEEDBACK TO
TEACHERS: A STUDY OF PRINCIPALS' UNDERSTANDINGS, EXPERIENCES,
AND PURPOSES**

by

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In Pennsylvania, Act 82 of 2012 introduced the Educator Effectiveness system and its foundational belief that student achievement is the result of teachers' high quality instruction and principals' high quality school leadership. With the heightened expectations of principal and teacher accountability for student achievement, principals positively impact student achievement through the day-to-day work of teachers. Principals intentionally design and communicate formative feedback so that teachers learn and grow.

This study explored the current practices and beliefs of principals who provide formative feedback to teachers. Principals and assistant principals were surveyed to gather evidence of their self-reported use of effective formative feedback qualities. They were asked to rank order research-based highly effective formative feedback qualities in order of perceived value in leading to teacher learning. Next, seven principals were interviewed regarding the methods they use to provide formative feedback to teachers. The principals were chosen to be interviewed because they reported similar feedback beliefs and practices as those reported in the literature on formative feedback.

This study found that principals and assistant principals value different qualities than the ones they use in their daily feedback practices. Additionally, principals and assistant principals believe that certain feedback qualities have an impact on teachers' practices that are different from those supported in the literature as being effective and are also different from those that they use in their own feedback messages to teachers. Principals who report beliefs that reflect the research on formative feedback are better able to defend and explain their feedback practices. When principals intentionally incorporate highly effective formative feedback qualities in their feedback messages to teachers, they contribute to the professional learning of teachers. They also learn and grow themselves, sustaining a professional learning culture.

TABLE OF CONTENTS

1.0	INTRODUCTION: THE RESEARCH PROBLEM	1
1.1	PRACTICAL SETTING OF THIS STUDY	4
1.2	RESEARCH QUESTIONS.....	7
1.3	THE SIGNIFICANCE OF THE STUDY	7
1.4	PERSONAL AND PROFESSIONAL PERSPECTIVE.....	10
1.5	A LOOK AHEAD.....	11
2.0	REVIEW OF THE LITERATURE.....	14
2.1	DEFINITION OF “FORMATIVE FEEDBACK”	14
2.1.1	Feedback and Behaviorism.....	15
2.1.2	Feedback and the 20th Century Workplace	16
2.1.3	Feedback in the Field of Education.....	17
	2.1.3.1 The Role of the Learning Team.....	18
	2.1.3.2 The Role of Assessment in Feedback.....	20
	2.1.3.3 Conclusion to Feedback in the Field of Education.....	21
2.1.4	Conclusion	23
2.2	RESEARCH AND THEORIES OF ADULT AND PROFESSIONAL LEARNING.....	23
2.2.1	Adult Professional Learning is the Result of Critical Reflection	24
2.2.2	Adult Professional Learning is Motivated by Experience	25

2.2.3	Adult Professional Learning Occurs in Situated and Social Contexts	26
2.2.4	Korthagen’s Integrative Pedagogy: Educator Learning and Formative Feedback	27
2.3	RECIPROCAL LEARNING OF PRINCIPALS AND TEACHERS	30
2.3.1	Supporting Teacher Learning to Increase Student Achievement.....	31
2.3.2	Principal’s Support of Teacher Learning as a Professional Obligation...	33
2.3.3	Using the Walkthrough for Professional Learning	35
2.3.3.1	Formative Classroom Walkthroughs	38
2.3.4	The Principal-Teacher Learning Relationship	39
2.3.4.1	Principals as Instructional Leaders.....	40
2.3.4.2	Principals as Professional Development Leaders.....	41
2.3.4.3	Educators as Professionals Who Continuously Learn.....	42
2.4	CONCLUSION: THE EMBEDDED EXPECTATIONS OF PRINCIPAL-TEACHER INTERACTIONS IN THE PENNSYLVANIA EDUCATOR EFFECTIVENESS SYSTEM.....	43
3.0	METHODS	46
3.1	CONTEXT OF THE STUDY	47
3.2	RESEARCH QUESTIONS.....	49
3.3	CONCEPTUAL FRAMEWORK.....	49
3.4	DESCRIPTION OF THE STUDY	52
3.4.1	Survey Participants	52
3.4.2	Survey Participant Recruitment	54
3.4.3	Response Rates to the Survey	54

3.4.4	Characteristics of Survey Participants	55
3.5	DATA COLLECTION AND ANALYSIS	57
3.5.1	Survey Data	58
3.5.1.1	Pilot Study for Survey Questions.....	62
3.5.2	Interview Data.....	63
3.5.3	Characteristics of Interview Participants.....	67
3.5.4	Descriptions of Principals who were Interviewed	68
3.5.5	Principals' Prevailing Views of Feedback.....	73
3.6	LIMITATIONS AND ASSUMPTIONS OF THE STUDY.....	74
3.7	CONCLUSION	76
4.0	ADMINISTRATORS USE POSITIVE, WORK-FOCUSED, AND DESCRIPTIVE QUALITIES MOST FREQUENTLY IN THEIR FORMATIVE FEEDBACK TO TEACHERS	78
4.1	SURVEY RESPONSE PATTERNS	80
4.1.1	Summary of Survey Responses	81
4.1.2	Concluding Discussion	82
4.2	DISCUSSION OF THE QUALITIES THAT ADMINISTRATORS USE MOST FREQUENTLY.....	83
4.2.1	Formative Feedback that is Positive	84
4.2.1.1	Positive Feedback that Helps Teachers Focus on the Process and not on Themselves	85
4.2.1.2	Positive Feedback that Identifies Teachers' Next Level of Growth	88
4.2.1.3	Positive Feedback that Builds a Productive School Culture.....	91

4.2.2	Formative Feedback that is Work-Focused	93
4.2.3	Formative Feedback that is Descriptive	96
4.3	CONCLUSION	98
5.0	ADMINISTRATORS VALUE CONSTRUCTIVE AND GOAL-ORIENTED FEEDBACK AS EFFECTIVE CONTRIBUTORS TO THE PROFESSIONAL GROWTH OF TEACHERS	100
5.1	SURVEY RESPONSE PATTERNS	101
5.1.1	Summary of Survey Responses	101
5.1.2	Concluding Discussion	103
5.2	DISCUSSION OF THE QUALITIES THAT ADMINISTRATORS RATED AS MOST EFFECTIVE	104
5.2.1	Formative Feedback that is Constructive	105
5.2.1.1	Constructive Feedback that Builds on Teachers' Own Desire to Improve.....	106
5.2.1.2	Constructive Feedback that Builds on Teachers' Strengths.....	107
5.2.1.3	Constructive Feedback that Builds on Teachers' Current Needs	109
5.2.1.4	Constructive Feedback for an Required Area of Needed Improvement	110
5.2.2	Formative Feedback that is Goal-Oriented.....	113
5.2.2.1	Goals that Administrators Set	114
5.2.2.2	Goals that Teachers Set	115
5.3	CONCLUSION	118

6.0	ADMINISTRATORS PROVIDE COMPARATIVE AND SPECIFIC FEEDBACK THAT FEEDS TEACHERS FORWARD	120
6.1	FORMATIVE FEEDBACK THAT COMPARES.....	122
6.2	FORMATIVE FEEDBACK THAT IS SPECIFIC	124
6.3	FORMATIVE FEEDBACK THAT FEEDS FORWARD.....	127
6.3.1	Feedback that Contributes to the Ethic of Constant Professional Growth..	128
6.3.2	Feedback that Aligns to the Needs of Each Teacher	129
6.3.3	Feedback that Sustains Trust	130
6.4	CONCLUSION	132
7.0	RESPONSES TO RESEARCH QUESTIONS AND FINDINGS	135
7.1	ADMINISTRATORS USE POSITIVE, WORK-FOCUSED, AND DESCRIPTIVE QUALITIES IN THEIR FEEDBACK MESSAGES TO TEACHERS	135
7.2	ADMINISTRATORS VALUE CONSTRUCTIVE AND GOAL-ORIENTED FEEDBACK AS EFFECTIVE CONTRIBUTORS TO THE PROFESSIONAL GROWTH OF TEACHERS.....	137
7.3	ADMINISTRATORS PROVIDE COMPARATIVE AND SPECIFIC FEEDBACK THAT FEEDS TEACHERS FORWARD.....	137
7.4	CONCLUSION	138
7.5	FINDINGS RELATED TO PRACTICE.....	139

7.5.1	When Principals Intentionally Incorporate Highly Effective Formative Feedback Qualities in their Feedback Messages, They Contribute to the Professional Learning of Teachers	140
7.5.2	Principals Learn and Grow Too When They Sustain a Professional Learning Culture that Benefits the Whole Learning Community	141
7.5.2.1	Principals Learn about Teaching and High Quality Instruction .	142
7.5.2.2	Principals Learn How to Give Better Formative Feedback.....	143
7.6	FINDINGS RELATED TO POLICY	144
8.0	IMPLICATIONS FOR PRACTICE AND POLICY	146
8.1	IMPLICATIONS FOR PRINCIPALS’ PROFESSIONAL DEVELOPMENT	146
8.2	LIMITATIONS OF THIS STUDY AND SUGGESTIONS FOR FURTHER RESEARCH.....	149
8.3	MY CONCLUDING REFLECTION	153
	APPENDIX A	155
	APPENDIX B	157
	APPENDIX C	159
	APPENDIX D.....	163
	APPENDIX E	164
	APPENDIX F	169
	BIBLIOGRAPHY	171

LIST OF TABLES

Table 1: Principals' Prevailing Views of Feedback.....	74
Table 2: Scale Used to Report Response Averages	79
Table 3: Number and Percentage of Responses to Survey Question 5.....	81
Table 4: Alignment of Research Question and Data Collection.....	164
Table 5: Qualities of Effective Formative Feedback as Identified by the Literature.....	166
Table 6: Response Rates for Individual Survey Questions.....	169

PREFACE

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1.0 INTRODUCTION: THE RESEARCH PROBLEM

The purpose of this qualitative study is to describe principals' beliefs and practices of giving formative feedback to teachers for the purpose of professional learning. The topic of principal feedback to teachers is both timely and important. It is of practical significance with regard to the recently amended statewide rating system for educators (Pennsylvania Public School Code, 2012). In addition to expecting principals to rate teachers with a summative performance level, this evaluation system expects principals to contribute to teachers' professional learning as part of the supervisory process. The Pennsylvania Department of Education provides resources for principals in the form of guiding questions and clearly defined standards of practice (2014a; 2014b; 2014d; 2014e). However, I am interested in knowing what building administrators actually do and believe to be effective in order to contribute to the professional learning of the teachers they supervise. While the Pennsylvania Educator Effectiveness system provides the context for this study and will be explained in more detail later in the chapter (Pennsylvania Bulletin, 2013; 2014), a brief history of teacher supervision and evaluation practices provides background information that will situate this study.

Teacher evaluation is routinely viewed as the responsibility of the school leader. However, since the 1950's, the concept that principals can be important contributors to the professional growth of teachers has been a topic of educational research and national reform (Blome & James, 1985; Sullivan & Glanz, 2009). In 1976, a review of 600 literature citations about the role of the

principal found that 17 percent of them mentioned the quality of teachers' instruction as being a principal's responsibility (Mullican & Ainsworth, 1979). Around the same time that principals were recognized as having a positive effect on professional development and effective teaching practices, researchers asserted that principals could also strongly affect student learning. Miller's study in 1976, for example, sought to determine the relationship between principal behavior and student achievement. He named various other school improvement strategies that focused on school climate, resources, and instructional strategies. Then, he introduced the possibility that "improving the skills of the principal and the organizational climate of the school may, in the long run, have a significant payoff in student growth" (Miller, 1976, p. 337).

In the 1980s, when literature on school reform again challenged the role of the principal, the concept of "instructional leadership" was framed with six categories. These six categories all directly related to teacher development and instructional effectiveness: (a) observe teachers and provide feedback, (b) monitor student progress, (c) build instructional programs through work with teachers, (d) secure resources for staff development, (e) communicate to staff the responsibility they have for student achievement, and (f) provide information and be a resource for teachers (Ginsberg, 1988). The research that was conducted at this time in turn informed influential and related publications and policies.

The publication of *A Nation at Risk* in 1983 named professional development for teachers as a priority in order to improve American public education. The study identified teachers' pedagogical practices as those that should be addressed by this needed professional development. In 1992, researchers in the field of professional development such as Glickman and Sergiovanni supported the claim that principals should contribute meaningfully to teachers' practices. They promoted a collegial and supportive style of supervision (Sullivan & Glanz, 2009). This more

democratic concept positioned principals as professionally and morally obligated to help teachers grow (Sullivan & Glanz, 2009). In 1993, Niece described three key qualities of instructional leaders. Instructional leaders are people oriented and interactional; they function within a network of other principals; and they feel they are strongly influenced and their skills are developed by administrative mentors. These qualities, Niece summarizes, are the “essence of the ... instructional leader” (p. 17). The blending of principal roles from a solitary manager to an instructional leader is significant because it serves as the foundation for the professional belief that strong instructional leadership is the hallmark of effective principals.

In the early 2000’s, the *No Child Behind Act* and the reauthorization of the Elementary and Secondary Education Act continued to expect the principal to directly affect student achievement. Act 82 of 2012 established the Pennsylvania Educator Effectiveness system which further named principals as responsible for students’ academic growth from year to year (not just one year’s achievement) and for the impact teachers have on their students’ growth. This brief history of teacher supervision and evaluation describes the national urgency to improve public education by increasing teacher quality and student learning. A common factor among the decades highlighted here is the responsibility of building administrators to ensure teachers’ professional learning, thereby contributing to student achievement and growth. To summarize, principals are expected to contribute meaningfully to the professional practices of teachers, so much so that student achievement and academic growth occur.

This study explores how principals work with teachers so that teachers improve and so that students learn. The next section will explain the current expectations of teachers’ and principals’ work and the evaluation system that rates their effectiveness. While the expectations are clearly stated, the processes and strategies that principals use to meet the expectations are very much left

up to them to decide. Therefore, this study seeks to contribute to the practical field of instructional leadership by describing what a sample of principals do to improve teachers' capacity to teach students.

1.1 PRACTICAL SETTING OF THIS STUDY

Pennsylvania's Educator Effectiveness system determines an educator's effectiveness through observation, evidence of professional practices, and student achievement and growth data (Pennsylvania Department of Education, 2015). This evaluation model aims to report teachers' and principals' effectiveness with both groups of educators sharing the responsibility for student achievement and growth. To do this, documents called "frameworks" compare the work of principals and teachers with universal rating standards. The work of principals is compared to *The Framework for Leadership* (Pennsylvania Department of Education, 2014b), and the work of teachers is compared to *The Framework for Teaching* (Danielson, 2011; Pennsylvania Department of Education, 2013a; 2013b; 2014a). Both the principal and the teacher frameworks set levels of proficiency in categories that describe the dimensions of effective principal and teacher behaviors.

The Pennsylvania Educator Effectiveness system holds principals and teachers jointly accountable and expects both groups to marshal efforts and resources in order to support student achievement (Pennsylvania Bulletin, 2013; 2014; Pennsylvania Department of Education, 2014a; 2014c). The connectedness between the leadership framework and the teaching framework is intentional and made explicit by the Pennsylvania Department of Education (2013a; 2014a). There are eight factors in common between the two frameworks: vision, common standards, high expectations for all, instruction, assessment, collaboration, safety and security, and

professionalism. Mutual responsibility for student achievement and academic growth is the central characteristic of the Pennsylvania Educator Effectiveness system. The next several paragraphs briefly explain important attributes of the teacher and principal models and then how both groups of educators are jointly accountable for student achievement and academic growth. As this study is situated in the area of overlap of the two models, a discussion of this area of overlap concludes this section.

The evaluation tool for classroom teachers attributes 50% of the effectiveness rating to the four domains of professional practice: Planning and Preparation, Classroom Environment, Instruction, and Professional Responsibilities (Pennsylvania Department of Education, 2015). While the Pennsylvania Educator Effectiveness system mandates the domains to assess and determine a teacher's final evaluation, it does not name specific supervisory practices in order to do so. Each school entity and supervisor has latitude in how to support teachers through their supervision and evaluation practices.

The Pennsylvania Educator Effectiveness system mandates a different effectiveness rating process for principals from the one described above for teachers. A portion of the principal's effectiveness rating is based on the effectiveness of the teachers that the principal supervises. Pennsylvania principals are expected to "foster excellent teachers, create positive learning environments, and increase and sustain student academic growth" (Pennsylvania Department of Education, 2014c, p. 1). The principal evaluation system identifies a common set of domains that describe strong educational leadership practices. Supervisors of principals use these domains to compare descriptions of exemplary work with a principal's actual work for the purpose of evaluation. Similar to the evaluation model for teachers, the Pennsylvania Educator Effectiveness

system does not name specific supervisory practices. Instead, the evaluation system guides local decisions about how to supervise and support principals.

This study explores and describes how principals contribute to the development of teachers by giving formative feedback, which *The Framework for Leadership* rubric names as a supervisory expectation (Pennsylvania Department of Education, 2014b). In two of the four evaluation categories, high-performing staff and high-quality teaching are emphasized. As an example of distinguished performance in the area of effective teaching, the framework provides this description: “The principal/school leader proactively recognizes quality teaching and establishes it as an example of expected performance” (Pennsylvania Department of Education, 2014b, p. 4). Another example of distinguished performance in *The Framework for Leadership* is this description of effective principal work: “The school leader conducts formative and summative assessments in measuring teacher effectiveness in order to ensure that rigorous, relevant, and appropriate instruction and learning experiences are delivered to and for all students” (Pennsylvania Department of Education, 2014b, p. 9). The term “formative” speaks to the educative intent of the feedback. The formative nature of feedback on teachers’ practices as they are observed and assessed by principals is described more thoroughly in Chapter 2.

A percentage of a principal’s rating is determined by student achievement and growth, as is also the case with teachers. Fifteen percent of a principal’s effectiveness rating is dependent on the connectedness that exists between his or her ratings of teachers and student achievement data. The expectation of the Educator Effectiveness system is that the academic achievement of students is commensurate with the ratings of teachers (Pennsylvania Department of Education, 2014a). For principals, of course, it would be ideal if student achievement was high and teacher ratings were strong. However, when this is not the case, principals must develop a plan to improve student

learning by increasing teachers' professional capacity. Frequent formative feedback on day-to-day teaching is an improvement strategy that is supported in the literature (Ball & Cohen, 1999; Danielson, 2010/2011; Moss & Brookhart, 2013; The Center for Comprehensive School Reform and Improvement, 2007).

1.2 RESEARCH QUESTIONS

The purpose of this qualitative study is to describe principals' beliefs and practices of giving formative feedback to teachers for the purpose of professional learning. The research questions for this study are the following:

1. What do principals identify as the qualities they include in their formative feedback to teachers?
2. What do principals identify as the qualities of feedback that most effectively contribute to teachers' professional learning?
3. What are the ways that principals provide ongoing formative feedback on the effectiveness of teachers and opportunities for growth for teachers?

1.3 THE SIGNIFICANCE OF THE STUDY

This study is situated in the shared space of instructional leadership, continual professional learning, and the obligation that principals have to contribute to the learning and development of the teachers they supervise. The notion that principals affect the professional growth and

development of teachers has been emphasized in the literature for over a half-century. In fact, it is well supported that effective principals, acting as instructional leaders, are important elements in successful schools (Bjork & Ginsberg, 1995; Holland, 2008-2009; Miller, 1976; Niece, 1993; Quinn & Andrews, 2004; Wong, 2005). The next few paragraphs provide a brief review of the literature that supports this notion.

Mentioned in section 1.0 above, by 1992, the term “instructional leader” was coined and promoted in the spirit of teacher improvement and student learning. However, this term carried a variety of connotations with regard to professional development. In some, principals act as mentors or learning team members (Bickmore & Bickmore, 2008; Curry & Bickmore, 2012; lisahunter, Rossi, Tinning, Flanagan & Macdonald, 2011; Moir, 2009). In others, principals are expected to maintain professional distance, only interacting with teachers in supervisory and evaluative roles (Bickmore & Bickmore, 2008; Bleeker, Dolfin, Johnson, Glazerman, Isenberg & Grider, 2012; Moir, 2009; Wood, 2005; Wong, 2004). Still other professional development models situate the principal as responsible for maintaining a building culture conducive to the comfort and professional growth of teachers (Bickmore & Bickmore, 2008; Curry & Bickmore, 2012; lisahunter et al., 2011; Moir, 2009). Despite the various roles of principals that exist in the literature, a consistent expectation of principals has been (and continues to be) to conduct observations of teaching and to evaluate teachers’ overall performance.

The Pennsylvania Educator Effectiveness system stands on the premise that student achievement and academic growth can be attained through high quality teaching (Department of Education, 2014a). Additionally, the Pennsylvania Educator Effectiveness system purports to measure a principal’s effectiveness in part through student achievement and growth data as well as in the alignment between a principal’s rating of teachers and these data (Pennsylvania

Department of Education, 2014a). The construct of the Pennsylvania Educator Effectiveness system emphasizes the accountability shared by principals and teachers. This study is timely and significant in that researchers, practitioners, and current education policy value and expect a professional learning relationship between principals and teachers.

Also timely and significant is the belief that principal feedback to teachers is a form of professional development that can lead to professional learning. This belief is rooted in the teacher-student learning relationship (Brookhart, 2008; Hattie, 2009; Hattie & Timperley, 2007; Kluger & DeNisi, 1996; Shute, 2008). The effectiveness of feedback between teacher and student is generally referred to in the context of “formative assessment” and is supported in the research as an effective teaching philosophy and strategy (Black & William, 1998; Black & William, 2009; Kluger & DeNisi, 1996; Moss & Brookhart, 2009; Sadler, 1989; Sadler, 1998).

While feedback had been identified as a contributor to teacher professional learning, additional research notes that feedback offered collaboratively, in the spirit of continuous learning by all participants in feedback process, is extremely powerful. For example, the Mid-Continent Research on Education and Learning (MCREL) organization reviewed three decades of additional research on the value of the principal in 2004. The report concluded that effective principals direct, provide for, and monitor professional development and maintain a culture of collaboration and collegiality in their schools (Wong, 2005). In particular, informal classroom visits and feedback are ways that principals can direct the learning and reflection of teachers (Cherian & Daniel, 2008; Holland 2008-2009; Roberson & Roberson, 2008; Varrati, Lavine, & Turner, 2009). The literature consistently underscores the importance of frequent feedback and how much teachers desire it (Breux & Wong; 2003; Cherian & Daniel, 2008; Wood, 2005). Since the construct and effectiveness of feedback in the professional learning relationship of principals and teachers are of

current interest, this study seeks to contribute to the literature that investigates the principal-teacher professional learning relationship.

1.4 PERSONAL AND PROFESSIONAL PERSPECTIVE

When I was a young teacher in the early 1990s, I remember a family friend suggesting I consider the principalship as my next career move. He was an elementary principal, and I thought that his advice was recognition of my nascent leadership ability. But when I asked for more information, he told me that being a principal was an easy way to make a decent living in the field of education. In fact, he said, “All you have to do is make sure the kids have enough pencils.” I was dismayed that his perspective of the job was a managerial one, and, further, one of management at the lowest level. As a high school English teacher, I was very aware of the changes the new state academic standards were making to curricula and was curious about the proposed legislation that would later be named the *No Child Left Behind Act of 2001*. I recognized that the education profession was changing, and the “pencils” comment epitomized for me the gulf that existed among those of us in public education. I wondered how I would continue to work with colleagues, like our family friend, who held such limited views of the job.

Thirteen years later, I did choose to pursue the principalship. My decision was not for a higher salary, because I had grown tired with teaching, or because I wanted to count pencils. Instead it was based entirely on the changing professional expectations of the principal role. Along with established academic standards at the state level and educational accountability at the national level, the professional literature I read illustrated how instructional leadership could result in greater student achievement. The thought of providing instructional leadership enticed me enough

to leave my treasured classroom in order to impact the quality of education at a broader level. Now that I have been an assistant principal or principal in three different schools for ten years, I am more driven than ever to provide high quality feedback to teachers to help them critically reflect on their practices, strengthen their work with students, and grow professionally. I want to continue to learn and grow, too, and I know that these formative feedback experiences teach me as well as, hopefully, the teachers I engage.

As a principal, I am frequently in the position of identifying, designing, and communicating formative feedback to teachers. Additionally, I was a participant in a three-year professional development initiative in my district wherein my principal colleagues and I were trained in the theory of formative assessment and in practices of giving formative feedback. While the bulk of this professional development focuses on the learning relationship between teachers and their students, we also explored the professional learning relationship between principals and teachers. Because of this job-embedded experience, I am curious as to what other principals believe and practice regarding the formative feedback they give to teachers for the purpose of professional learning.

1.5 A LOOK AHEAD

A core component of a principal's job is to supervise and evaluate teachers. Principals do some of this work through the observational information they choose to reflect on after informal visits in teachers' classrooms, the feedback they choose to craft either verbally or in writing, and the delivery of that feedback to teachers. Providing feedback that improves teaching, leads to student achievement and growth, and culminates in a summative rating are expectations of the

Pennsylvania Educator Effectiveness system (Pennsylvania Department of Education, 2014a). Feedback that leads to learning also satisfies an obligation for continuous learning and professional growth in the field of education.

This chapter introduced the practical setting, the significance of the study, and my personal and professional perspective of the topic of principal feedback to teachers. In order to engage the proposed research questions, Chapter 2 explores several critical areas of knowledge. The nature of feedback offers several universal points regarding how feedback depends on context and experience to engage reflection and lead to learning. This information will be presented through the lenses of different epistemologies. The literature review also presents current research on professional and educator learning, the feedback practices of principals that are supported in the literature, and how feedback practices relate to the newly implemented Pennsylvania Educator Effectiveness system. Chapter 3 explains the research methods for this qualitative study that uses a preliminary survey to both collect data and determine interview participants. It also introduces the interview participants in order to create rich meaning in the discussion of their responses that follow in Chapters 4 through 6.

The process of principals providing feedback to teachers is both personally and professionally compelling to me. Being a principal myself, I strive to be an instructional leader (Niece, 1993) who offers strong support and guidance in the practice of teaching. I believe that principals are in the ideal position to do this as we are, largely, former teachers and have the opportunity to watch a diverse group of teachers at work each day. Our professional experience and knowledge is enhanced through continuous learning and the opportunity to observe, analyze, and compare the practices of teachers. As a result, we should feel able and obligated to provide high quality feedback that leads to professional learning for both teachers and principals. This

feedback should affirm the effective work that teachers do, while providing suggestions and recommendations that extend their professional learning and practices. By exploring the beliefs and practices of principals related to teacher feedback, I am learning more about how principals can be effective instructional leaders. Chapter 7 presents these findings and implications for practice and policy. I plan to use this knowledge to provide meaningful feedback to teachers as I continue to strengthen my educational leadership. I have also used this knowledge to suggest next steps in the professional learning of principals so they can provide high quality professional feedback. Chapter 8 captures my recommendations for principals' professional development and areas of additional research that may contribute to this and other related topics.

2.0 REVIEW OF THE LITERATURE

This chapter synthesizes literature on the topics of feedback and learning, professional learning, and the reciprocal learning relationship between principals and teachers. This study aims to describe what principals believe to be effective qualities of formative feedback and how their practices relate to their beliefs and to current research about formative feedback in professional learning.

2.1 DEFINITION OF “FORMATIVE FEEDBACK”

Since the central concern of this study is on formative feedback that promotes professional learning, this first section defines and differentiates “formative feedback” from the traditional behaviorist and popular business production uses of the term “feedback.” Formative feedback describes or responds to the current status of a learner’s work and leads to new understanding for all people involved in the learning experience (Black & Wiliam, 1998; Kluger & DeNisi, 1996; Ramaprasad, 1983; Shute, 2008). In particular, formative feedback contains several important components: (a) it describes the features of a learner’s work (Ramaprasad, 1983; Shute, 2008); (b) it compares the learner’s work to an established standard of performance (Ramaprasad, 1983; Shute, 2008); (c) it contains information that helps the learner close the gap between his or her own practice and the standard of performance (Ramaprasad, 1983; Shute, 2008); and (d) it

stimulates new learning and understanding for all people involved in the work experience (Black & Wiliam, 1998; Brookhart & Moss, 2015; Kluger & DeNisi, 1996; Moss & Brookhart, 2015; Ramaprasad, 1983; Shute, 2008).

2.1.1 Feedback and Behaviorism

Behaviorists hold the view that learning happens when external feedback influences the acquisition of observable skills for a pragmatic purpose. Taken to the extreme, radical behaviorism denies the existence of any intrinsic contributor to learning such as introspection and reflection (O'Donohue & Ferguson, 2001). In the late 1800's, Pavlov conducted the well-known dog and bell experiment to document how behavior can be controlled by a stimulus. From the behaviorist perspective, learning is achieved and recognized through the development and display of behaviors. Behaviorism situates the learner as being the person who received the stimulus and the instructor as the person who prescribes it.

In the twentieth century, Skinner (1971) grounded his work in behaviorism in order to develop the theory that human learning is also affected by environmental feedback. Differing from the pure input-output model of Pavlovian behaviorist theory, Skinner recognized that naturally occurring feedback directly affected a learner's response. He believed that people are motivated to learn and exhibit behaviors to avoid being controlled and to increase the likelihood of feeling worthy and admired. His contribution to the research on feedback and learning is known as "operant conditioning." Operant conditioning is repeated reinforcement through either the encouragement or disregard of behaviors (Merriam, 2009). Skinner (1971) believed that behaviorism and operant conditioning was the basis for solving complex and dynamic problems such as overpopulation, the threat of nuclear war, and even undesired personality traits. His theory

was that behavior could be controlled by the “technology” of the interdependent and reciprocal relationship between a person and the environment (Skinner, 1968; 1971, p. 5).

Thorndike had earlier studied learning from a behaviorist perspective. However, he held a less extreme view of behavior being controlled by naturally occurring or human calculated negative feedback. Thorndike noted that positive reinforcement yields stronger and more consistent effects on behavior than negative reinforcement (Thorndike, 1932). This theory recognized intrinsic contributors to learning, such as motivation, which can be remediated or reinforced in order to achieve learning goals. His “Law of Effect” described the association a learner makes with a stimulus based on how satisfying it is (Thorndike, 1932). A learner’s weaker association may not lead to learned behaviors; however, a learner’s stronger association to a stimulus is more likely to result in the desired behavior. Thorndike also emphasized the importance of repetition and readiness to learn as important factors. His stated intention in exploring feedback from a behaviorist perspective was to use the scientific method to determine “when and how to reward and when and how to punish, in all spheres of human management” (Thorndike, 1932, p. 313).

2.1.2 Feedback and the 20th Century Workplace

One such sphere of human management is in the field of business operations. Different from the behaviorist focus on feedback’s effect on human behavior, Ramaprasad (1983) situated the utility of feedback in business production. If the desired parameters of a product or service are the goal, then Ramaprasad sought to define feedback that would help to obtain it. It is important to understand Ramaprasad’s definition as a departure from that offered by behaviorists. He emphasized that feedback, in and of itself, does not lead to learning. Instead, feedback provides

information about the performance. Ramaprasad argued that this information can lead to learning (and not just compliance) if it is composed of three parts: information about the present performance or level of understanding, a description of the ideal or standard to be reached, and specifics about the gap that exists between the two (1983). It is through engagement with and response to feedback that actions to close the gap are initiated.

Ramaprasad's definition of feedback, "information about the gap between the actual level and the reference level of a system parameter which is used to alter the gap in some way" (1983, p. 4), has contributed great value to the field of teaching and learning. Since then, researchers have sought to add dimension to this definition in regards to how feedback promotes learning (Black & Wiliam, 1998; Black & Wiliam, 2009; Ramaprasad, 1983; Sadler, 1989). The broader concept of feedback captures the dimension of the learning process that Ramaprasad emphasized in his caution that feedback, by itself, doesn't lead to learning but instead can inform learning. This is only possible if the feedback message contains a description of the ideal, the statement of the current level of performance, and acknowledgement of the gap that separates the two.

2.1.3 Feedback in the Field of Education

Feedback from a behaviorist's perspective is input, pressure, or influence that is prescribed and externally applied to change behavior. Feedback from a business perspective is information that identifies the gap between the ideal and current state of performance. In the education field, feedback likewise identifies gaps in understanding. Additionally, information that is called "feedback" must include strategies to close the gap. Research on feedback in the late 1900s and early 2000s focused on the conditions that help reduce these gaps in understanding. It found that the formative teaching and learning process is dependent on the critical relationship of the learning

team and the precision of assessment results. These two factors are discussed individually in the following sections: Section 2.1.3.1 will explain the valuable role of the learning team, and Section 2.1.3.2 will describe the value of high quality and frequent assessment.

2.1.3.1 The Role of the Learning Team

Essentially, effective feedback answers three questions that must be asked by both the teacher and the learner: (a) “Where am I going?”, (b) “How am I going?”, and (c) “Where to next?” (Hattie & Timperley, 2007, p. 87). Identifying the gap and providing feedback that serves to narrow it is what Black and Wiliam (1998) called the “heart of pedagogy” (p. 16). In the educative interactions between the teacher and learner, helpful feedback can be produced, shared, and used to stimulate learning. Black and Wiliam (1998) also recognized that effective feedback focuses on learning goals and contains useful strategies for getting the learner closer to them. These strategies are designed and delivered with the learner’s needs and abilities in mind and, most importantly, with the assumption that each student can and will succeed (Black & Wiliam, 1998).

This focus on the learner is supported in Sadler’s (1989) work on feedback. It is the teacher’s obligation to express feedback in language that the learner already knows and can access (Sadler, 1989). Additionally, this view assumes that a learner and teacher are equally engaged in producing and using feedback. The dynamics of such a productive feedback model are based firmly on the relationship of the learning team: the teacher’s assumptions and knowledge of the learner and the learner’s self-perceptions and motivation to learn. This model is driven by both participants asking progressive waves of the “where,” “how,” and “where next” questions so that effort, action, and reflection uncover clearer and clearer understandings of the ideal parameter and learning strategies needed to attain it (Sadler, 1989).

Therefore, feedback in the field of education is only called such when it leads to learning by identifying current practice, comparing it to ideal practice, and offering strategies to close the gap between the two. With this in mind, research has shown that feedback takes different forms. Effective feedback verifies the learner's performance, elaborates on it by offering next steps to close the gap between the performance and the standard to be reached, and is offered frequently to the learner (Hattie & Timperley, 2007; Kulhavy, 1977; Kulhavy & Stock, 1989; Sadler, 1989). It can be corrective, suggestive, encouraging, and confirming (Hattie & Timperley, 2007; Kulhavy, 1977; Schute, 2008; Winne & Butler, 1994). It is also a consistently held belief that feedback can be called such only when instructors and learners aim for the gap and engage with the feedback to close it (Moss & Brookhart, 2009; Sadler, 1989; Schute, 2008). When feedback includes details of how to improve (rather than a statement of what is correct or incorrect), learners are engaged to regulate their own progress in the next steps of learning (Butler & Winnie, 1995; Hattie & Timperley, 2007; Kulhavy, 1977; Sadler, 1989; Schute, 2008).

In addition to the notion that feedback informs the learner, research has also shown that feedback from the learner can and does inform the teacher. In Hattie's (2009) book entitled *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*, feedback provided by the learner to the instructor was shown to have a powerful effect on learning. By knowing what learners know because they can explain their thinking and knowledge and by instructors being open to hearing this information, teachers can use feedback to make programmatic decisions with respect to readiness, diagnosis, and remediation (Hattie, 2009; Sadler, 1989). Hattie summarizes the powerful effect of learners providing feedback to teachers by saying, "Feedback to teachers helps make learning visible" (p. 173). Also making learning visible is assessment. The research

on formative assessment, which is an evaluation of knowledge that is used to inform the next area of learning, situates formative feedback squarely in the middle of the teaching-learning process.

2.1.3.2 The Role of Assessment in Feedback

Formative assessment is defined as a process of gathering evidence (usually through demonstration of new learning) in order to determine if learning occurred and what next strategies will advance future learning (Moss & Brookhart, 2009). This approach develops capacity through an assessment and feedback cycle that involves the teacher and the learner together and actively aiming for a common goal (Moss & Brookhart, 2009). Essentially, the teaching and learning process spirals simultaneously, and feedback takes on the form of new instruction in addition to being a method of validating students' answers (Kulhavy, 1977).

Sadler (1989) alternatively studied the topic of assessment by looking at times when instructional practices did not lead to learning. Sadler's investigation engaged theories of self-directed learning and concluded that "[students] must develop the capacity to monitor the quality of their own work during actual production" (1989, p. 119). Sadler emphasized the need for teachers to enable students' independence by building students' skills so they can assess their own work. Sadler (1989) recognized the complex nature of learning and how formative feedback from teachers can help students learn to reflect critically on their own work in order to direct their own learning in the future.

Also contributing to the conceptualization of formative feedback was Black and Wiliam's (1998) work that sought to describe the recursive cycle of assessment, feedback, and learning. They named "formative interactions" as critical elements in this cycle (Black & Wiliam, 1998, p. 26). In order to encourage these formative interactions, Black and Wiliam offered strategies for teachers. They said that effective educational pedagogy is "as much concerned with prediction as

with what [the learners] have already [learned], and it is only in interaction with the learner (and the learning) that useful assessments can be made” (Black & Wiliam, 1998, p. 52).

Nearly a decade later, Black and Wiliam (2009) offered a rationale for formative assessment based on theories of learning, instructional pedagogy, and feedback research they synthesized since their 1998 publication. Distinguishing a theory of formative assessment from a general theory of teaching and learning is the “creation of, and capitalization upon, ‘moments of contingency’ in instruction for the purpose of the regulation of learning processes” (p. 10). Black and Wiliam (2009) expanded on the notion of these “moments” by describing the necessity of a formative interaction in which the teacher’s and student’s cognitions are influenced. Since this interactive moment is understandably nuanced, possibly subjective, and dependent on genuine communication, Black and Wiliam (2009) conclude that formative assessment practices are as much an extension of a teacher’s theory of learning as they are a result of a teacher’s pedagogical choices.

2.1.3.3 Conclusion to Feedback in the Field of Education

The previous two sections explained that the roles of the learning team and assessment contribute centrally to feedback used in the field of education. A common theme is Black and Wiliam’s (2009) concept of “moments of contingency.” In the daily vernacular of teachers, these are often referred to as “teachable moments.” This means that teaching and learning occur immediately after a misconception or curiosity is revealed. Teachers are expected to capitalize on interactions with students that avail the opportunity to provide clarity, examples, and/or related information that will help the student to learn. A teachable moment is generally unplanned and dependent on the teacher’s perception that information is needed by the students. Typically, the purpose of a teachable moment is to build capacity or to clarify a misconception so that new

learning can be connected and utilized more quickly. The same sense generally exists with formative feedback provided by a principal to a teacher. Principals provide formative feedback that is specific to an observed learning moment (Brookhart & Moss, 2013; 2015). The effectiveness of formative feedback depends on the principal's ability to question, challenge, and capitalize on the moment of contingency.

Another characteristic that exists in order for formative feedback to be called such is that it is learner-oriented and purposefully designed to lead to learning and not final evaluation. Formative feedback respects the learner by providing an opportunity to learn that is specific to his or her needs and readiness. Principals who design formative feedback use their powers of observation and reflection to receive and think about information gathered from a teaching moment (Moss & Brookhart, 2013). Principals are also aware that it matters how they choose to communicate their observation and reflection. They seek to provide feedback that is specific, evidence-based, and related to clear parameters and expectations (Brookhart & Moss, 2015). They comment, question, nudge, and engage dialogue about the teaching moment with the teacher. The collaborative nature of formative feedback between principal and teacher is paramount to its success.

The intention of formative feedback is to affect the immediate scenario and also to develop increased capacity in the teacher so that current learning can be applied to future teaching moments. A principal evaluates the feedback to make sure it is evidence-based, informative, and offered in an appropriate tone. Then, the principal asks if the feedback initiated learning in both the teacher and the principal. Lastly, the principal assesses the feedback's usefulness for the teacher in future teaching circumstances (Brookhart & Moss, 2015).

2.1.4 Conclusion

The previous sections presented how feedback is a critical element in the educative process. Learners benefit from feedback when they demonstrate new knowledge. Externally, learners receive feedback when experiences and the learning context produce assessments of their performance. Learners also internalize feedback when they reflect on and self-assess their performance. For feedback to be called formative feedback in the field of education, it needs to describe the work of the learner, compare it to a standard of practice, offer strategies to bring the work to the level of the standards, and lead to learning by both the learner and the instructor. This happens in cycles of performance, assessment, and feedback (Black & Wiliam, 1998; Kluger & DeNisi, 1996; Ramaprasad, 1983; Shute, 2008).

2.2 RESEARCH AND THEORIES OF ADULT AND PROFESSIONAL LEARNING

A second overarching concept to explore for the purposes of this study pertains to adult and professional learning. Both adult learning and professional learning theory maintain three foundational pillars: (a) adult professionals have different learning needs than children (Kolb, 1984; Merriam & Bierema, 2014; Merriam et al., 2007; Mezirow, 1981); (b) individual adults are motivated by their experiences (Knowles, 1970; Taylor, 1997); and (c) adult learning is situated and social (Knowles, 1970; Mezirow, 1981; Taylor, 1997). Each of these pillars are explained in the next three sections. The elements of formative feedback are also emphasized in the discussion of each pillar to emphasize how formative feedback provides information to adult professionals, such as teachers and administrators, on current levels of performance, the ideal to be reached, the

gap that exists, and strategies to close the gap. Formative feedback also leads to learning by all involved in the experience. In order to unpack these foundational components, educational theory, adult learning research, and currently espoused professional learning best practices are synthesized.

2.2.1 Adult Professional Learning is the Result of Critical Reflection

Research suggests that adults learn through deep, meaningful, active, and reflective engagement with the material to be mastered. Mezirow's (1981) theory of critical reflection positions the learner at the center of the learning process. Through active reflection and purposeful integration of new knowledge, the learner can create a changed, and possibly transformed, understanding of what he or she previously knew (Mezirow, 1981). While Mezirow described one level of critical reflection, Taylor (1997) presented empirical studies revealing multiple levels of critical reflection. He argued that the process is instead "recursive, evolving, and spiraling in nature" and that it is affected by the immediate and historical context of new learning (p. 44).

Placing learning through reflection specifically in the adult context, Schön (1983) adapted adult learning theories for a practical setting and illustrated how critical reflection is necessary for professional learning. In 1983, *A Nation at Risk* named teacher quality as an area of needed educational reform. This call to action created a desire to provide professional development for teachers who were entering and those who were already established in the field. However, the professional development that teachers received evidenced an underlying unexamined theory of professional practice marked by a lack of professional knowledge models to guide research and practice (Schön, 1983). Schön named the sentiment of this era the "crisis of confidence in public education" (1983, p. 8). He criticized the behaviorist professional development models in which

the basic science of teaching was studied and then applied to situations. These models didn't recognize or value the messiness of real world practice in which constant feedback is given to and provided by learners so that high quality instruction is possible (Merriam & Bierema, 2014). In order to guide the development of an epistemology of professional practice, Schön (1983) advanced a theory of professional reflection in which both reflection-on-action and reflection-in-action is central.

While reflection-on-action occurs after the situation unfolds, reflection-in-action occurs in the very midst of a situation and at a time when one's thinking shapes and changes what is happening. Reflection-in-action results in what Schön describes as a "reflexive conversation" within the learner. A reflective conversation considers what is happening and feedback gained from what is happening in order to make an immediate contextual reflection on the feedback (p. 36).

2.2.2 Adult Professional Learning is Motivated by Experience

Among several theories, the concept of "experience" differs. For example, behaviorists claim that environmental feedback in the form of negative and positive reinforcement creates experiences that a learner wants to repeat or avoid (Skinner, 1971; Thorndike, 1932). Dewey (1938) supported the inseparable connection between experience and learning. However, he disagreed with the behaviorist idea that learning resembled an input-output model of stimuli and responses which in the first half of the 20th century was the dominant theory of education. He argued for a change in the traditional pedagogy of teaching. Dewey (1938) explained how teaching is dependent on creating experiences that learners can use to scaffold new learning; therefore, teachers need to know the unique characteristics of their learners in order to design effective instruction. In fact,

Dewey (1938) generalized the learning process as being social, communicative, ever changing, experienced-based, and environment-dependent.

Experience continues to be recognized as a critical factor for adult learning. Knowles (1970) presented a framework for adult learning, called andragogy, that is predicated on the notion that adults learn through educative experiences situated within cycles of instruction and feedback. For over forty years, andragogy has remained the primary model of assumptions about adult learning. Through this view, external and internal feedback and the consideration of adult learners' self-concept, experience, readiness to learn, orientation towards learning, motivation, and purpose for learning are critical to educating adults (Knowles, 1970; Merriam et al., 2007).

2.2.3 Adult Professional Learning Occurs in Situated and Social Contexts

Kolb (1984) engaged the experience-learning link and explained it as a recursive cycle wherein internal and external conflict, made obvious through feedback, necessitates reflection that leads to learning. In short, Kolb (1984) emphasized the utility of conflict in the process of experiential learning, especially in adults. He named intellectual growth as the outcome of necessary confrontation with not knowing. This inherent conflict is normalized as a constructive process, necessary for the adaption and survival which is arguably the central goal of human learning (Kolb, 1984).

Focusing on the power of internal feedback and conflict in not knowing, Mezirow (1981; 1997) advanced the notion that a disorienting dilemma results in reflection and even possibly knowledge transformation. Based on Freire (1985), Mezirow (1981) focused on adult learning by engaging andragogy's emphasis on the needs and preferences of adults. The belief that learning is influenced by the internal context is captured in Mezirow's description of the transformative

process: (a) adult learners experience a disorienting dilemma and attempt to expand or revise their existing perspective; (b) when this doesn't work, adult learners try to establish new points of view that still complement existing perspectives; (c) if meaning cannot be made, adult learners transform their existing perspectives by confronting assumptions and acknowledging gaps in their own perspectives; and (d) lastly, adult learners become critically aware and reflective of their own and others' knowledge biases in order to seek autonomous self-directed learning that is necessary to fully participate as an emancipated adult learner (Kitchenham, 2008; Mezirow, 1997). Through the context of not knowing, feedback is sought and responded to in order to satiate the need to know.

Thinking of context more concretely, Lave and Wenger (1991) proposed that learning should be actualized in practice. They recognized the social and contextual nature of feedback to be so valuable that they encouraged communities of practice as a means of advancing learning (1991). To illustrate this, Lave and Wenger (1991) called their theory of situated learning "legitimate peripheral participation." It is a theory of social practice in which learning is considered an aspect of all activity, regardless of context and intent. With this, Lave and Wenger (1991) captured the intentionality and motivation of adults who place themselves in the social world in order to learn.

2.2.4 Korthagen's Integrative Pedagogy: Educator Learning and Formative Feedback

The previous three sections illustrate how the professional learning of educators is supported by formative interactions resulting from critical reflection, past experiences, and current context. These interactions both respond to and create feedback among professional learners in a highly social context. Using this as a basis for his work on the professional learning of teachers,

Korthagen developed a pedagogy of teacher learning that draws from Lave and Wenger's (1991) situated learning theory. Situated learning theory likens the process of professional learning to an apprenticeship whereby learners purposefully locate themselves in the social world. This enables learners to gain knowledge through enculturation of the norms, behaviors, and beliefs of an environment (Korthagen, 2001; 2010; Lave & Wenger, 1991). With situated learning as his guiding theory of learning, Korthagen challenged the traditional technical-rationality model of teacher education that separates practice from theory and was criticized by Schön (Korthagen, 2001; 2010; Schön, 1983).

Using the basic tenets of adult and professional learning previously reviewed in this section, Korthagen (2001) reframed the goal of professional learning for teachers. He said that professional learning experiences enable teachers to apply logic through critical reflection so that immediate, intuitive responses are formed and practiced. Due to the importance he placed on formative feedback from a teacher's daily classroom work, Korthagen's (2001; 2010) integrative view of educator learning provides a strong basis for this study. The following paragraphs present a summary of the conceptual foundation of Korthagen's pedagogy of teacher education in order to illustrate how it relates to the literature on feedback and learning generally and educator learning specifically.

Korthagen (2001; 2010) advanced his integrative view of teachers' professional learning by first explaining the three levels of learning. These three levels are important to know because each evidences learning and guides responses in different ways. Korthagen (2001) argued that those who facilitate teacher learning should know which level they are trying to engage, why that is an appropriate level to engage at that time, and to what degree the teacher is ready to learn at that level. Similarly, teachers who wish to learn must settle themselves at a level that will enable

them to reflect on, identify, and potentially change or modify their practice. Ultimately, the goal is for teachers to embed their new learning in their practice so that their immediate, generally unconscious, reactions in the classroom evidence their knowledge. Korthagen (2001; 2010) explained that this can be done if new learning is offered and received at the most effective level of learning. He names this level for learning the schema level, and, through first engaging the schema level, a learner's theory level develops and then the gestalt level is changed.

Korthagen (2001) dispelled the linear, rational, theory-driven view of teacher decision-making (2010). He explained that the immediate response to a situation, like a teaching dilemma between a teacher and students, is a result of one's gestalt formation (Korthagen, 2010). One's gestalt involves cognition, emotions, motivations, and behaviors. Its application to situations is immediate and unconscious, triggered by body-mind responses learned from previous experiences. Seen from a gestalt perspective, teacher behaviors are more complex than traditional teacher education strategies might assume. Korthagen (2010) argued against initiating teacher learning at an educational theory level, as typically done by technical-rational models of teacher education. He said that this practice will not result in this automaticity and will likely not affect teachers long enough for long term assimilation. Additionally, he concluded that significant changes to a teacher's behavior and decision-making can only be made at the gestalt level. To do so, Korthagen (2001, 2010) explained, a learner's schema must be challenged.

The schema level is the second level of learning in Korthagen's integrative view of teacher education. Since the learning process for adults originates with concrete and lived experiences, it is at the schema level that a person reflects on a situation and his or her actions. Through the repetitive application of this learning to new situations, automatic and unconscious gestalt-level

responses are developed. Finally, changed gestalts lead to modified and potentially improved responses to classroom situations (Korthagen, 2001; 2010).

The third level of Korthagen's view of teacher learning is called the theory level. At this level, a person wishes to organize or interpret his or her working schema in order to deeply understand it, explain it, or even use it to guide others. Traditional practices of teacher education begin in this stage. However, in terms of teacher learning, Korthagen (2001; 2010) argued that this should not be the first level to engage but the last level to evolve. The goal of professional learning is for teachers to apply logic so that the complicated schema level is ordered and then the new learning is reduced to the immediately responsive gestalt level.

Korthagen (2001; 2010) explained that classroom teaching situations demand immediate holistic responses that integrate knowledge, perception, and interpretation. This integration of responses includes feelings, memories of similar experiences, values, role conceptions, needs, concerns, and routines. Korthagen (2001) proposed that an integrative view of teacher learning will close the gap between theory and practice by affecting the day-to-day practices of teachers. Formative feedback between principals and teachers can be situated in this integrative view of teacher learning,

2.3 RECIPROCAL LEARNING OF PRINCIPALS AND TEACHERS

Much attention has been paid in the last 15 years to teacher learning and principal involvement in that learning (Blasé & Blasé, 1999; Brookhart & Moss, 2013; Drago-Severson, 2002; 2007; Price, 2011; Wahlsrom & Louis, 2008). To understand the current context of professional educator learning and how the learning of principals and teachers is interdependent, the following sections

offer a brief summary of the literature on educator learning since the first set of academic standards were introduced in the early 2000s.

2.3.1 Supporting Teacher Learning to Increase Student Achievement

In 1998, Darling-Hammond asserted that the publication of new academic standards would require the need for more skillful teaching and a demand for teachers to continually learn. She defended the notion of continual professional learning by referencing John Dewey and his landmark critique of American education entitled *Experience and Education* (1938). Using her interpretation of Dewey's stance on progressive education, Darling-Hammond advocated for professional development that was (a) embedded in practice, (b) accomplished through critical engagement and reflection, and (c) realized through collaborative discourse. This list of three important professional development features provided guidance for efforts to improve teaching and increase student achievement in the early years of the "No Child Left Behind" (2001) educational policy and the first state academic standards (just before and after the year 2000).

Literature on teacher professional development in the years to follow Darling-Hammond's work continued to support these same three professional development features. Ball and Cohen (1999) made the argument that teachers needed to be viewed and dealt with as intellectuals and practitioners instead of technicians who deploy a standard set of operating procedures. They concluded that teachers should be engaged in professional learning that is job-embedded and inquiry-based and that teachers should explore their learning through discussion, argumentation, and reflection (Ball & Cohen, 1999). As the literature established teachers as continual learners who deserve their own high quality professional training, attention turned to the role of principals to ensure their appropriate engagement of and interaction with teachers. Blasé and Blasé (1999)

explored professional development that used the features delineated by Darling-Hammond (1998) and others to determine the ways in which principals implemented these features. They reported that instructional leaders talk with teachers to promote reflection and promote professional growth by being learners themselves (Blasé & Blasé, 1999). They concluded their findings with a request to principals:

Talk openly and freely with teachers about instruction. Make suggestions, give feedback, and solicit teachers' advice and opinions about classroom instruction in an inquiry-oriented approach. Strive to develop cooperative, nonthreatening teacher-supervisor partnerships – characterized by trust, openness, and freedom to make mistakes. As instructional leaders, emphasize the study of teaching and learning, and be willing to model teaching skills. (p. 371)

Blasé and Blasé's (1999) reference to "feedback" and instructional leadership in the passage above underscores the burgeoning belief that teachers wanted to grow professionally through experiences named by Darling-Hammond to be job-embedded, collaborative, and reflective.

In 2002, Drago-Severson referred to supportive principals as those who provide "learning-oriented school leadership" (p. 41) and argued for the urgent need for principals to help teachers increase their knowledge and skills so that they can meet current school challenges. She concluded that "to improve schools, we need to learn more about how leadership practices can support teacher learning" (p. 4). In 2007, Drago-Severson delivered a response to her own call-to-action with several conclusions about the nature of effective instructional leadership practices. She based these conclusions on her research of adult learning theory. She recommended that principals do the following: (a) prioritize time and space for reflection and collaboration, (b) center learning around professional dialogue, (c) participate in shared inquiry with teachers, (d) be open to and

model respect for differences in perspectives, (e) encourage the willingness to take risks, and (f) attend to adult learning needs.

Certain repetitive characteristics are revealed in this brief summary of eight years of influential literature that names effective leadership practices in the professional development of teachers. Collaboration, shared curiosity, and open communication are critical elements that principals should directly support and model in order for continual professional learning to help students achieve.

2.3.2 Principal's Support of Teacher Learning as a Professional Obligation

The purpose of the previous section was to build a brief timeline of how principals became viewed as having a substantial impact on teacher learning. Researchers have continued to explore the role of the principal in professional development. For example, in 2008, Wahlstrom and Louis published an article on educator quality and principal leadership. This approach was similar to Blasé and Blasé's (1999) work in that teachers' voices were situated as the authority in the conversation surrounding educational reform and improvement. Wahlstrom and Louis (2008) stated, "In the current era of accountability, a principal's responsibility for the quality of teachers' work is simply a fact of life" (p. 459). Continued research on principals who lead high achieving schools has revealed two common characteristics: effective principals share leadership and effective principals focus on instruction. Both of these characteristics relate to the school culture that principals are directly responsible for creating.

The literature reveals that principals can strengthen the quality of teachers' work through shared leadership. The value of trust and mutual responsibility between principals and teachers was made evident in Drago-Severson's (2007) work on positive leadership practices and

Wahlstrom and Louis's (2008) work on principal responsibility. Likewise, Price's (2011) research highlighted the importance of a balance of power and trusting relationships between principals and teachers. Price argued that when power and trust are shared, both the principal and teachers are more satisfied and committed and therefore are more effective in educating children. She suggested that trust is built when principals make expectations clear, create a vision with staff input, demonstrate openness to ideas and input, and model commitment to the organization (Price, 2011).

The literature also reveals that teachers demonstrate high quality of work when their principals are involved in instructional goals. Teachers have reported feeling satisfied and having positive perceptions of the school when they work with principals who spend time on day-to-day instructional tasks, like performing observations (Horng, Klask, & Loeb, 2010). Continued research on this topic of instructional task engagement by principals reveals that while completing classroom observations does not strongly lead to a positive school culture, time spent on coaching topics is found to be particularly effective (Grissom, Loeb, & Master, 2013).

A type of coaching activity is called a walkthrough. A walkthrough is a brief, often unannounced, visit to a classroom during instruction (The Center for Comprehensive School Reform and Improvement, 2007; Grissom et al., 2013; Moss & Brookhart, 2013). Walkthroughs have been established in the literature as a valuable source of information for principals (Ginsberg & Murphy, 2002; Moss & Brookhart, 2013; The Center for Comprehensive School Reform and Improvement, 2007). Walkthroughs enable principals to look for patterns in curriculum, assessment, and alignment to academic standards (The Center for Comprehensive School Reform and Improvement, 2007). They inspire dialogue between principals and teachers about best practices without the formal observation and reporting process (Moss & Brookhart, 2013; The

Center for Comprehensive School Reform and Improvement, 2007). Walkthroughs serve a management purpose that enables principals to assess factors such as student discipline, materials availability, building security, and certain protocols. Currently espoused in the research is the notion that walkthroughs provide the opportunity to engage with students and teachers as a fellow learner (Brookhart & Moss, 2013; Moss & Brookhart, 2013; 2015).

However, recent debate on the purpose and use of walkthroughs is exploring Grissom et al.'s (2013) conclusion that walkthroughs are most valuable and effective when principals use them for professional development rather than information gathering. The authors recognized that the effectiveness of walkthroughs is dependent on the principals themselves, their comfort with providing feedback, and the purpose for which they are conducted. The concluding remark of the article was the following: "Walkthroughs are a substantial part (almost half) of all the time principals spend on instruction. Schools may be better served if principals spend more time using the information for school improvement than collecting it" (Grissom et al., 2013, p. 442). To generalize, walkthroughs avail the opportunity to watch teachers as they teach and watch students as they learn and provide a context for formative feedback. The productive benefit of principals performing walkthroughs is reminiscent of the spirit of instructional leadership originally intended in the 1980's (Ginsberg, 1987).

2.3.3 Using the Walkthrough for Professional Learning

As mentioned in the introduction, the Pennsylvania Educator Effectiveness system has set the structure for the state's current educator evaluation system. In particular, how teachers and principals are evaluated has substantial implications for the principal's work (Derrington, 2011). Principals are held evaluated, more than ever before, on how they lead the learning in their schools

(Pennsylvania Department of Education, 2015). Teachers are expected to show evidence of their professional learning in the supervision and evaluation process (Pennsylvania Department of Education, 2015). One way for principals to lead the learning is by providing formative feedback to teachers. Conducting classroom walkthroughs is an effective method for principals to notice teachers' strengths and needs, decide on what to provide feedback, and formulate the feedback with the intention of impacting teachers' continued learning and growth. This section of the Literature Review will explain this particular implication for principals' work more fully. In my 10 years of experience as a principal, walkthroughs that my supervisors have required have been conducted for different purposes. I elaborate on each of these ways because they illustrate the variety in purpose and style of walkthroughs. I want to establish this variability in order to focus on what is currently being promoted as walkthrough protocol best practice.

One way I conducted walkthroughs was for the purpose of my own professional learning. A leader (from the local University) assembled a group of teachers and administrators, and we visited classrooms to observe teaching and learning. These walkthroughs were scheduled such that the teachers knew when we would visit and planned to be engaged in whole group instruction so we could observe. The observers and I watched the teacher, briefly talked with the students about what they were learning, and then reassembled in the hallway or nearby conference room to discuss what we noticed. We identified best practices, debated the teaching choices we observed, and listed the pros and cons of alternative teaching strategies. These walkthroughs were designed to be short classroom visits that focused on the effects of instruction and on what the teacher did (Moss & Brookhart, 2013). I was a first year principal, and this type of walkthrough helped me to reflect on the effectiveness of teaching practices. I used this new knowledge when I formally observed teachers and evaluated their performance.

Another form of walkthroughs that I have been required to do as a principal were for the purposes of encouragement and positive reinforcement. The district-wide protocol required unannounced visits to classroom in order to observe teaching and learning. The principals used a list of predetermined specific teaching strategies that they used to notice, name, and praise (for example, the use of higher level questions). These would typically be strategies that had been recently emphasized in professional development initiatives. Principals would look for demonstrations of them in day-to-day teaching and recognize the effort with a positive note of encouragement. This type of walkthrough is what Moss and Brookhart (2013) describe as “guided by checklists of strategies that principals look for as they observe teachers and instruction” (p. 43). Although these walkthroughs are conducted with the intent to reinforce the desired teaching behaviors, they also provide an opportunity to offer suggestions.

A third form of walkthroughs that I have performed is called a formative walkthrough. Its purpose is to watch the learning to determine if learning goals are being met and to formulate feedback for the teacher that would improve student learning. While principals still compare the instructional work with a set of expected teaching components, the focus is not on whether or not the teaching component happened but rather the effectiveness of the instruction. This is what Moss and Brookhart (2013) call “understanding the lesson from the student’s-eye-view” (p. 44). Principals provide feedback directly to the teacher, and, in many cases, it initiates dialogue via email or in a follow-up face-to-face meeting.

From walkthroughs serving as a tool used to introduce principals to the role of instructional leader, to a method for noting and praising compliance, and to a targeted system for watching the learning of students, walkthroughs have taken different forms over the last 10 years of general use in schools (Moss & Brookhart, 2013). In concert with new understandings of how principals are

supposed to contribute to the learning and growth of teachers, the nature of the walkthrough has evolved. With this in mind, Moss and Brookhart (2013) are uncovering a new form of walkthrough that “is an intentional learning process focused on raising the achievement of all learners in the building – the students, the teachers, and the principal” (p. 44). They emphasize the importance of learning by situating the walkthrough as the vehicle by which professional learning occurs for the principal and the teacher. This expectation of reciprocal learning coalesces with the Pennsylvania Educator Effectiveness system and with current research about instructional leadership, adult learning, professional development, and school culture.

2.3.3.1 Formative Classroom Walkthroughs

As depicted in the previous section, the purpose and format of classroom walkthroughs has changed over the last decade. Currently, the notion of formative classroom walkthroughs is being advanced. Formative classroom walkthroughs are responsive to new academic standards and evaluation systems (Derrington, 2011; Pennsylvania Department of Education, 2014b), strongly related to research on effective professional learning practices (Korthagen, 2010; Lave & Wenger, 1991; Merriam & Bierema, 2014; Schön, 1983), and in concert with what has been established as desirable instructional leadership strategies (Drago-Severson, 2007; Grissom et al., 2013; Pennsylvania Department of Education, 2014b; Price, 2011; Wahlstrom & Louis, 2008). This type of walkthrough engages the principal and teacher both and equally as learners with the intention of improving instruction and raising student achievement (Brookhart & Moss, 2013; Moss & Brookhart, 2013; 2015). Embedded in the fabric of formative classroom walkthroughs is much of what Darling-Hammond (1998) discovered in her early work on professional development strategies and also what Blasé and Blasé (1999) reported in their work on effective instructional

leadership: Collaboration through reflection and dialogue on practical “real time” teaching episodes is what teachers want and what leads to higher student achievement.

Moss and Brookhart (2015) base the concept of formative classroom walkthroughs on a theory of action resting on the guiding principle that both principals and teachers want to learn as a result of informal observations of classroom practices. They use the term “formative” deliberately to capture the essence of collaborative improvement efforts and professional growth over time. What is observed is reflected upon and then shared between the principal and teacher. This conversation begins with feedback that is designed to move both parties forward in their understanding and recognition of effective teaching and learning practices.

Brookhart and Moss (2015) emphasize that effective feedback depends on the larger learning context that places professional learning in a very positive and desirable light such that the improvement process is positive and motivating. As the research on school culture and climate has shown, this shared learning context or theory of action can exist in a professional environment that values collaboration, dialogue, and continuous improvement (Blasé & Blasé, 1999; Darling-Hammond, 1998; Desimone, 2009; Drago-Severson, 2007).

2.3.4 The Principal-Teacher Learning Relationship

Conceptually, the Pennsylvania Educator Effectiveness system and this study are both framed with the belief that principals can contribute greatly to the professional learning of teachers. This belief is supported by three important areas of research: principals as instructional leaders, principals as professional development leaders, and educators as professionals who continuously learn. The nexus of three overlapping areas of research provides a basis for this study. The following paragraphs summarize the research that supports each of these three contributing areas. This

section then builds on the principal-teacher professional learning relationship with a more thorough explanation of the Pennsylvania Educator Effectiveness system and the embedded expectations of principal-teacher interactions.

2.3.4.1 Principals as Instructional Leaders

Educational reform in the 1980s emphasized the critical role of the teacher. In order to support teachers, the literature encouraged the expansion of the principal's role from manager to multi-faceted instructional leader. This role was initially defined as having six areas of responsibility, and teacher evaluation and teacher learning were two of the six responsibilities (Ginsberg, 1988). The other four areas captured the traditional areas of resource allocation, program implementation, student progress, and staff communication.

In the 1990s, educational researchers continued to explore the role of the principal and found that principals who succeeded in being instructional leaders, as previously defined, shared several common characteristics: they were people-oriented, they were collegial, and they were learners themselves (Niece, 1993). The reason for this interest in principals and their attributes came, in part, from the previous research that concluded that effective principals directly affected student achievement (Miller, 1976). While teacher improvement was believed to be a route to educational reform, student achievement was the goal. Therefore, the principal's effect on a school, and thereby student academic progress, became an important area of study.

In the 2000s, the definition of instructional leadership highlighted the possibility of raising student achievement through teacher professional development. The educational literature described instructional leaders as principals who are responsible for and lead a variety of professional development activities (Blasé & Blasé, 1999; Drago-Severson, 2002; Drago-Severson, 2007; Wahlstrom & Louis, 2008). This view of instructional leadership recommended

that principals establish a school culture of continuous learning and improvement. It stressed that principals should interact with their teachers in order to lead their professional learning not just evaluate their professional practice (Wong, 2005). Research at this time uncovered the importance of feedback to learning (Black & Wiliam, 1998; 2009; Clark, 2012; Sadler, 1989). It also emphasized how professionals who want to learn crave feedback in order to do so (Breux & Wong; 2003; Cherian & Daniel, 2008; Wood, 2005). Therefore, feedback provided to teachers by principals became an area of importance in school reform measures (Cherian & Daniel, 2008; Holland 2008-2009; Roberson & Roberson, 2008; Varrati, Lavine, & Turner, 2009).

2.3.4.2 Principals as Professional Development Leaders

The second contributing topic in the foundation of this study is that of continuous professional learning. Teacher development research has emphasized the notion that teachers, like any other adult, learn throughout their careers (Hattie, 2009; Schön, 1983). To understand professional learning is to, in part, understand the nature of adult learning. The research base on adult learning is rich and varied. There are several commonly held views of adult learning among the different epistemologies: (a) learning is dependent on experience (Dewey, 1938; Knowles, 1970; Thorndike, 1932); (b) learning is influenced by context (Kolb, 1984; Lave & Wenger, 1991; Mezirow, 1981); and (c) learning is achieved through reflection (Mezirow, 1981; Schön, 1983). Among all of these views, feedback is positioned as an important component in the learning process. Simply defined, feedback is called such when it compares current practice with desired practice and provides strategies for achieving the desired level of practice (Ramaprasad, 1983). The existence of specific, productive, frequent feedback is key in successful achievement and growth for any learner (Black & Wiliam, 1998; Sadler, 1989). This is true both for school-aged and adult professional learners (Hattie, 2009).

2.3.4.3 Educators as Professionals Who Continuously Learn

The third area of focus that this study engages is that of continuous professional learning. In recent years, feedback and professional growth have appeared as central components in educational programs. National competitive programs include professional learning elements as well as the expectation that principals monitor and provide guidance for professional growth. Both the Race to the Top grant (started in 2011) and School Improvement Grant (started in 2010) contain examples of this expectation of principal-supported continuous learning (Coggshall, Rasmussen, Colton, Milton, & Jacques, 2012). The expectations embedded in these federal grants paved the way for Pennsylvania's Educator Effectiveness system and the focus on continuous professional learning to be the responsibility of principals and teachers. Coggshall et al. (2012) summarizes the federal commitment to evaluation as being the vehicle for improvement by saying, "The spirit of the policies is clearly directed toward . . . continuous improvement of teaching effectiveness through the provision of evidence-based feedback to teachers" (p. 2).

Charlotte Danielson and her team (2013) succeeded in elucidating the professional practice of educators in a framework that identifies, defines, and describes proficiency levels for teaching. Her work led to the development of practical tools for principals to use in order to provide feedback and to guide growth in the effective teaching practices that were clearly defined in gradient terms (Danielson, 2010/2011; 2013). These tools supported that which was embedded in the federal programs mentioned above: teachers are expected to continuously learn and improve, and principals are expected to be actively involved in the professional learning process. The Pennsylvania Department of Education revamped its evaluation system and used the Danielson framework to do so. In 2012, rules and regulations guiding the new tool were released (Pennsylvania Public School Code). With it, a related document entitled "Principal and Teacher

Effectiveness Frameworks: How Are They Connected?” explained the intentional overlap in the principal and teacher evaluation frameworks and identified several key areas of commonality (Pennsylvania Department of Education, 2013a). In particular, the shared areas of “Vision” and “Instruction” were two that required an alignment of goals, effort, and resources between principals and teachers to reach the student-centered expectations described in both evaluation frameworks. A more thorough explanation of the implication for principals’ work in the Pennsylvania Educator Effectiveness system and the embedded expectations of principal-teacher interactions is presented in the next section.

2.4 CONCLUSION: THE EMBEDDED EXPECTATIONS OF PRINCIPAL-TEACHER INTERACTIONS IN THE PENNSYLVANIA EDUCATOR EFFECTIVENESS SYSTEM

The Pennsylvania Educator Effectiveness system offers a visual representation of the connection between the principal and the teacher frameworks in the form of a Venn Diagram as well as in narrative form with explanation of essential factors connecting the two and guiding questions that principals can use to discuss common factors with teachers (Pennsylvania Department of Education, 2013a; 2013b). In the area of “Vision,” it is written that “educators must take time to gauge where they are against where they would like to be to offer the best opportunities for student achievement” (Pennsylvania Department of Education, 2013a, p. 2). The practice of evaluating present achievement against optimal achievement is directly related to the definition of feedback offered by Ramaprasad (1983) and presented earlier in this chapter. The common area of

“Instruction” is also specifically mentioned in the overlapping areas of the principal and teacher evaluation frameworks.

It is the case that current day practice in education positions the principal as an instructional leader who is still responsible for the same six facets listed by Ginsberg in 1988. However, the emphasis placed on the principal’s work with teachers and their development versus the principal’s work as the building’s manager has changed over time. What has also changed is the expectation that teachers will provide evidence of their improved practice with artifacts that demonstrate their response to their principal’s input and feedback. In 2011, Derrington provided a warning for how the work of the principal will change with the revision of teacher evaluation systems. Derrington anticipated that principals would need to have greater authority, be able to collaborate and calibrate expectations, and “see teachers as adult learners who work best when actively engaged in the improvement process” (2011, p. 51).

Hargreaves and Fullen (2012) related this to the transformation in medical practice where transparency in diagnosis and treatment between the doctor and patient is crucial for successful results. The point of transparency and collaboration encapsulates recent changes in the principal and teacher relationship with regard to professional learning, growth, and evaluation. In the words of Hargreaves and Fullen, an appropriate summary is this: “So making teaching and learning reciprocally visible is more than a cliché – it is sophisticated practice in any professional sphere” (Hargreaves & Fullen, 2012, p. 53).

Making learning visible harkens to the title of Hattie’s (2009) landmark book, *Visible Learning: A Synthesis of over 800 Meta-Analyses Relating to Achievement*, that named feedback as an important teaching tool. The feedback cycle Hattie described as impactful is when the learner and teacher talk to one another about the learning goal, the effect of the teaching experience, and

the resulting understanding. The same cycle of communication is emphasized in the Educator Effectiveness Administrative Manual. It names “collaborative, reflective, and focused discussion” as essential between the teacher and administrator relevant to the teacher’s performance and effectiveness (Pennsylvania Department of Education, 2014a). For this to be accomplished, the nexus of principals as instructional leaders, principals as professional development leaders, and educators as professionals who continuously learn is an important area of continued study.

3.0 METHODS

The Pennsylvania Educator Effectiveness system and the embedded *Framework for Leadership* describe important principal leadership behaviors that are believed to lead to student achievement. Monitoring and coaching of teachers are two critical behaviors of building administrators that directly lead to teachers' learning and indirectly, yet powerfully, affect the learning of students. *The Framework for Leadership* document specifically describes what these behaviors should look like in a section called "Leadership for Learning." One way that principals and assistant principals monitor and coach their teaching staff is by providing formative feedback after walkthroughs or observations.

The Literature Review explored the nature of formative feedback and referenced 12 effective formative feedback qualities that lead to professional learning. In essence, effective formative feedback messages contain one or some of these qualities and contribute to teachers professional learning by describing what the principal observed during the walkthrough, comparing it to an ideal standard of practice, identifying where the work can improve, and naming strategies for desired improvement.

3.1 CONTEXT OF THE STUDY

Formative feedback is different from evaluative feedback that principals give to teachers for the purpose of providing an annual performance rating. It is also different from the general term “feedback” in that a formative approach seeks to develop new learning and understanding in addition to describing or responding to the current status of the work (Black & Wiliam, 2009; Kluger & DeNisi, 1996; Ramaprasad, 1983; Shute, 2008). The nature of formative feedback and its contribution to learning, and specifically to the learning of adults, is presented in the earlier review of the literature.

For the purposes of this study, formative feedback is defined as written or oral communication offered for the purpose of professional learning. The reason that this study focuses on formative feedback is that the Pennsylvania Department of Education’s Educator Effectiveness system states an expectation that principals contribute to the learning of teachers. This study’s intent was to better understand what principals routinely do and believe regarding the formative feedback they give to teachers. Chapter 1 presented the general notion of this expectation in two of the four principal evaluation categories. More explanation of this requirement follows in the paragraphs ahead.

Formative feedback has several important qualities: (a) it describes the features of a learner’s work (Ramaprasad, 1983; Shute, 2008); (b) it compares the learner’s work to an established standard of performance (Ramaprasad, 1983; Shute, 2008); and (c) it contains information that helps the learner close the gap between his or her own practice and the standard of performance (Ramaprasad, 1983; Shute, 2008). It is generally understood that formative feedback is an important component in adult learning (Knowles, 1970; Lewis & Sewell, 2007; Merriam & Bierema, 2014) and, in the case of this study, adults who are teachers (Khachatryan,

2015; Schön, 1983; van der Lans, van de Grift, & van Veen, 2015). Most importantly, formative feedback leads to the learning of all involved in the shared experience (Black & Wiliam, 1998; Kluger & DeNisi, 1996; Ramaprasad, 1983; Shute, 2008).

The relevance of formative feedback in today's education context may be stronger now than ever before. In Pennsylvania, Act 82 of 2012 introduced the Educator Effectiveness system which marked a new era of accountability for teachers and principals. Due to the heightened levels of principal and teacher accountability for student achievement, there is strong incentive for principals to raise student achievement through the day-to-day work of teachers. One way to do this is for principals to contribute to teachers' professional capacity by ensuring that they are implementing high quality instruction. *The Framework for Leadership* describes this key responsibility of principals in a section entitled "Domain 3: Leadership for Learning." Within this section, the actions of a leader who "implements high quality instruction" are further described in the following way:

The principal/school leader monitors progress of teachers and staff. In addition, the school leader conducts formative and summative assessments in measuring teacher effectiveness in order to ensure that rigorous, relevant, and appropriate instruction and learning experiences are delivered to and for all students. (Pennsylvania Department of Education, 2014b, p. 9)

This description is accompanied by performance levels that use the terms "monitor" and "coach" to name the supervisory and instructive work that an effective principal does with teachers. This is where the expectations of principals, as described in the evaluation system, relate to this study. Principals can indeed engage the expectations of Domain 3: Leadership for Learning by watching what teachers do ("monitor") and then helping teachers to get better ("coach"). One way to help

teachers improve their work is to provide formative feedback that describes the work, compares it to an optimum standard of practice, identifies where the work can improve, and names strategies for the desired improvement. This qualitative study identified the formative feedback qualities that principals use in their feedback to teachers. It also named the qualities that principals say are most effective in describing professional practice and contributing to professional growth. This study additionally explored the ways principals give teachers ongoing formative feedback on teachers' effectiveness and opportunities for growth.

3.2 RESEARCH QUESTIONS

The research questions for this study were the following:

1. What do principals identify as the qualities they include in their formative feedback to teachers?
2. What do principals identify as the qualities of feedback that most effectively contribute to teachers' professional learning?
3. What are the ways that principals provide ongoing formative feedback on the effectiveness of teachers and opportunities for growth for teachers?

3.3 CONCEPTUAL FRAMEWORK

The conceptual framework that guided this qualitative study is Schön's description of the "reflective practitioner" who engages in intentional, critical, sustained reflection in order to better

understand and improve one's own practice and the practice of others (Schön, 1983). His seminal work explains the importance of reflecting on and responding to the feedback loop of experience, learning, and practice. While Schön is not a researcher of teachers, his work guides the field of adult professional learning and provides a conceptual framework for this study. Act 82 of 2012 established legislation that requires principals to contribute to the professional development of teachers. As shown in the previous section, *The Framework for Leadership* describes standards of practice that are related to the definition of formative feedback established earlier in this chapter (Pennsylvania Department of Education, 2014b). For example, principals need to ensure a high quality, high performing staff by establishing examples of expected teaching performance. They must monitor the progress of teachers through formative assessment that reveals strengths and needs based on observable data. Principals are expected to support continuous professional growth by targeting individual staff members' needs and providing the necessary professional development to satisfy those needs.

Classroom observations and brief classroom visits called "walkthroughs" avail principals the opportunity to watch the goings-on in a classroom and enable them to help each teacher learn and grow (Grissom et al., 2013; Moss & Brookhart, 2013; Wahlstrom & Louis, 2008). While traditional observations, which are part of the supervision and evaluation process, are designed to capture a complete lesson and may last approximately thirty to sixty minutes, walkthroughs provide immediate information to principals that can be used as evidence of strengths and needs. Schön's research is especially helpful in understanding how such classroom visits by principals can become valuable and useful sources of professional learning.

Section 2.2 of the literature review synthesized research on adult and professional learning. The three widely recognized pillars of adult and professional learning are the following: (a) adult

professionals have different learning needs than children (Kolb, 1984; Merriam & Bierema, 2014; Merriam et al., 2007; Mezirow, 1981); (b) individual adults are motivated by their experiences (Knowles, 1970; Taylor, 1997); and (c) adult learning is situated and social (Taylor, 1997; Knowles, 1970; Mezirow, 1981). Therefore, the literature shows that adults learn by reflecting on their real world experiences and then intentionally sharing their reflections and experiences with others so that knowledge can be confirmed, denied, or contested.

In a professional setting, Schön uncovers the practice of “reflection-in-action” as an effective way for professionals to learn (Schön, 1983). He remarks on the dependency of professional learners on the moment-by-moment reactions that provide evidence of their “knowing that is implicit in action” (Schön, 1983, p. 50). Schön argues that professionals have long demonstrated an ability to reflect while in action. For example, teachers must continuously think about the effect of their instruction while they are teaching in order to adjust what they are doing and saying in order to meet the needs of their students. Likewise, principals must reflect on the work of teachers in order to help teachers meet professional goals, relate the teachers’ work to district objectives, and meet the expectations listed in the Pennsylvania Department of Education’s *Framework for Leadership* (2014b). Schön’s (1983) reflection-in-action situates this act of instructional leadership and identifies it as powerful practice that leads to improvement and growth. Conceptually, Schön’s work framed this study so that the formative feedback perceptions and behaviors of principals can be better understood.

3.4 DESCRIPTION OF THE STUDY

This qualitative study describes the beliefs and practices of principals who provide formative feedback to teachers. A hallmark of qualitative research is that meaning making is fluid, inquiry-based, yet systematic (Berg, 2009; Hatch, 2002; Schilling, 2006; Trochim & Donnelly, 2007). In order to capture these qualities, this study was organized into two phases of inquiry designed to collect descriptive data. First, participants self-reported their practices and beliefs by responding to a survey. Then, formative feedback practices were further explored in semi-structured interviews with individual principals. These principals provided survey responses that indicated that they believed in the value of the most effective qualities as identified by the research. The following sections describe the study's overall design, starting first with a discussion of the participant sample and the methods for data collection and analysis.

3.4.1 Survey Participants

Principals and assistant principals composed the predetermined criterion for participants in this study. There are two reasons why this study involved these two groups. First, all participants are school administrators who provide feedback to teachers and are evaluated using the common statewide Principal Rating Tool (Cozby, 2009; Pennsylvania Bulletin, 2014). The Principal Rating Tool includes specific categories that are linked to the content of *The Framework for Leadership* (Pennsylvania Department of Education, 2014b). Among other areas that are critical to effective leadership, principals and assistant principals are expected to demonstrate and are evaluated on their ability to provide feedback to teachers. The Pennsylvania Department of Education has produced several publications to illustrate the connectedness of the principal and teacher

effectiveness frameworks (Pennsylvania Department of Education, 2013a; 2014b; 2014c). These documents explain that principals must ensure the excellence of teachers through informal observations and formative feedback in order for teachers to understand and monitor their own performance. Since all participants in this study work in the same state, it is likely that they share a common understanding of the Pennsylvania Educator Effectiveness system and its expectations of administrators.

Second, because the principals and assistant principals who were invited to participate in this study work in the same county, the likelihood of a common understanding of the Principal Rating Tool exists. The local Intermediate Unit¹ provides professional training and resources for the various components of Act 82 of 2012 to all school districts in the county. Therefore, principals and assistant principals may have received similar training from the same Intermediate Unit or have had the same Intermediate Unit's support in their engagement of the Educator Effectiveness system. This study focuses squarely on the daily work of principals who have firsthand, real world knowledge and experiences in the practices of providing feedback and in the process of being evaluated for doing so (Fowler, 1995).

Nearly 50 principals and assistant principals who work in elementary and secondary public schools participated in this study. As building administrators, they are responsible for conducting and completing teachers' annual evaluation. The evaluation process involves the principals in providing timely feedback that contributes to the teachers' professional growth. The group of school leaders who participated in surveys and interviews shared valuable information about their

¹ In Pennsylvania, Intermediate Units serve as regional education services agencies that seek to better connect and align local public school districts with the Pennsylvania Department of Education. There are 29 Intermediate Units in the Commonwealth of Pennsylvania that provide education services such as curriculum and instruction support, educational and systems planning, technological resources, and professional development.

practices and beliefs of forming and communicating formative feedback to teachers for the purpose of teachers' professional learning.

3.4.2 Survey Participant Recruitment

This study collected responses that evidenced principals' and assistant principals' practices and beliefs in giving feedback to teachers. An invitation to participate was sent to all 117 principals, assistant principals, associate principals, and co-principals working in the same county's public schools. The email addresses were copied from district websites during a compilation period in early March 2016. A link to the online survey was included in the invitation letter as well as directions to access and complete it. The link connected participants to the Qualtrics Survey System, which is provided for student research through the University of Pittsburgh. This system allows for electronic survey distribution, response collection, and basic analysis in a confidential and secured environment. The text of this invitation is located in Appendix A.

3.4.3 Response Rates to the Survey

One hundred and seventeen principals and assistant principals received an emailed invitation to participate in the survey. Four of these emails were returned as undeliverable, so the potential pool of participants amounted to 113 current principals and assistant principals. In the first two weeks of deployment, 29 participants started or completed a survey. A reminder email was sent at the end of the two-week window. Within two days, 16 more principals and assistant principals started or completed a survey. Fifteen days passed with only one additional respondent completing the survey, so the survey was closed.

Forty-six surveys were started and 34 were completed. Of the surveys that were started, the majority of the questions (7 out of 8) were answered. It seemed that the respondents who quit the survey did so after they answered Question 7 which asked, “Are you willing to participate in a brief follow-up interview?” Since these respondents did not agree to a possible interview and likely chose “No,” it is assumed that they manually closed out of the last screen instead of clicking the “Exit” command. Response rates for each question are shown in Appendix G. The overall participation rate of all invited participants for all survey questions averaged 38%. The Institutional Review Board granted permission to collect and use data from unfinished surveys. Therefore, the data from respondents who provided some responses but did not complete the survey are still included in the description of results and findings that follow in the next three chapters.

3.4.4 Characteristics of Survey Participants

The goal of this study was to name what principals reported as the qualities they included in their formative feedback to teachers, what principals identified as the qualities of feedback that they believed to most effectively contribute to teachers’ professional learning, and the ways that principals provided ongoing formative feedback on the effectiveness of teachers and opportunities for growth for teachers. Therefore, the focus of the survey instrument was to gather information regarding school leaders’ practices and beliefs of using formative feedback. Several simple demographic questions were asked in the event that data analysis through stratified respondent groups resulted in germane patterns.

Of the 46 participants who responded to part or all of the survey, 36 (78%) reported that they were principals and nine (20%) reported that they were assistant principals. No respondent

answered with the other given job titles of “Associate Principal,” “Co-Principal,” or “Other.” Forty-five participants responded to the question that asked them to name the level of the school system in which they work. Of the 45 respondents, 25 (54%) administrators reported that they work at the secondary level. Twenty (44%) reported that they work at the elementary level. Since the information gathered by both of these questions represents 45 out of the 46 respondents, the job title and school level of one person who was listed as a building administrator on a public school district website and who participated in this survey is unknown.

The participants in the survey reported the number of years that they worked as an administrator (including the 2015-2016 school year). The range of answers spanned from the lowest reported number of three years to the two highest reported numbers of 50 and 51 years. The third highest reported experience number dropped to 33 years. Because of the unlikelihood that a person would work for 50 or more years as a building administrator (therefore making him or her between 75 and 80 years old), the numbers of 50 and 51 were removed from the data set for the purpose of reporting the average number of administrative years. Therefore, the average number of years was 13 with the most commonly recorded administrative experience level being six years.

Another piece of information collected by the survey was the respondents’ years of teaching experience. Forty-five out of the 46 total survey participants answered this question with numbers ranging from five years to 55 years. The answer of 55 years was given by the same respondent as the answer of 50 years in the previous administrative experience question. Therefore, this survey response was eliminated due to the unlikelihood that an individual with a 55 year teaching career would also serve a 50-year administrative term. The average length of

teaching experience for all respondents was determined to be 8.2 years. The majority of responses fell into the five, six, and seven-year band.

After completing the survey, one of the respondents shared that she was not a teacher before becoming an administrator. Instead, she served her first years in education in another professional role. Not knowing how to record this on the survey instrument, she simply entered the number of years in this different role as though they were teaching years and contacted me individually with the correct information. Therefore, in this and the next chapter, the mention of non-administrative public education experience is noted as “other school experience” instead of as “teaching experience” to capture the breadth of possible circumstances.

3.5 DATA COLLECTION AND ANALYSIS

Using a mixed methods design, this study contained two data collection phases, survey and semi-structured interviews. The sequential form of this mixed methods design was meant to uncover a clearer understanding of the topic of professional formative feedback by triangulating data from these multiple methods (Mertens, 2010). A survey instrument collected data from which descriptive statistics of the general practices and beliefs of respondents were reported (Creswell, 2009; Mertens, 2010). The survey was also used by the researcher to identify a sample of participants to interview. This sample was drawn from those who identified many of the same high impact characteristics of effective formative feedback as those which had been determined by the literature. Interviews explored more deeply the practices of this group of principals. A method of responsive interviewing was followed so that codes could emerge during the data

analysis (Creswell, 2009). The next section explicates these data gathering instruments and the methods that were used for analysis.

3.5.1 Survey Data

The survey collected data on principals' actual use of certain qualities of formative feedback. From the review of the literature in Chapter 2, 12 qualities of formative feedback were identified as effectively leading to professional learning. The 12 qualities and their definitions are

- Collegial: Feedback that situates both the principal and teacher as learners.
- Comparative: Feedback that compares the episode of teaching to best or highly desired standards of practice.
- Concrete: Feedback that leads the teacher towards future instructional decisions.
- Constructive: Feedback that notices and names an area of improvement for the teacher as a result of watching the episode of teaching
- Descriptive: Feedback that objectively describes what the observer saw.
- Feeds Forward: Feedback that identifies the next level of work for the teacher.
- Goal-Oriented: Feedback that is focused on the teacher's professional goals.
- Positive: Feedback that notices and names strengths observed in the episode of teaching.
- Process-Focused Feedback that looks at what the teacher is doing to engage the students in their learning.
- Specific: Feedback that is limited to one or two areas of focus.
- Timely: Feedback that is provided in a teachable moment.

- Work-Focused: Feedback that is centered on what the students are doing, saying, writing, and/or making.

Since the participants of this survey were principals and assistant principals, the survey intentionally recognized the varied demands placed on them from many stakeholders. Therefore, the survey was purposefully brief and succinct. The survey contained several opening questions that asked respondents to provide their current title and to select descriptions of their work environment and experiences. Then, a message to participants about the statewide evaluation tool contextualized the next set of questions by referring to Act 82 of 2012 and *The Framework for Leadership*. This embedded message to participants emphasized the practical connection between this study and participants' daily work. It also was meant to help stimulate the respondents' recollection of recent feedback episodes by preparing them for the overarching question (Fowler, 1995). This message prompted participants to reflect on their own feedback practices through an overarching question: "Think of recent episodes of feedback that you have provided to teachers. To what degree did you include the qualities listed ... in these written or verbal feedback messages?" This question was followed by a list of effective feedback qualities to which participants responded with an estimation of significance in their feedback messages to teachers. The significance options were the following:

- (a) In my feedback messages to teachers, this quality was not included.
- (b) In my feedback messages to teachers, this quality was rarely included.
- (c) In my feedback messages to teachers, this quality was occasionally included.
- (d) In my feedback messages to teachers, this quality was routinely included.
- (e) In my feedback messages to teachers, this quality typically dominated.

Since such judgments needed to be context-dependent, the survey was written to help increase the likelihood that respondents recalled their own feedback messages that they then compared against each quality listed in the survey (Tourangeau, Rips, & Rasinski, 2000). The complete text of the survey is located in Appendix C.

Responses to each of the questions were used to provide descriptive analysis of the frequencies of responses and statistics of central tendency (means, medians, and modes) for each feedback quality listed (Mertens, 2010). The data were also explored to learn if factors such as position, level, and years of experience demonstrated patterns among survey responses that could be further explored in the interviews or potential follow-up conversations. I conducted this analysis because I wondered if, in particular, similar lengths of teaching experience would yield similar patterns in formative feedback practices. Since this was a curiosity of mine, I wanted to remain open to other patterns in the data that I did not independently consider.

With an overall response rate of under 40 percent (46 respondents out of a possible 113), the data indicated patterns of feedback use and beliefs that were generally consistent with the literature. These stratified data sets did not supplement the findings with unique information. They also did not lend perspectives that would further address the research question. Therefore, for conciseness, these additional stratified data analyses have been eliminated from the discussion of each research question. This is a different plan than the one originally proposed. In the original data analysis and reporting plan, the data were going to be reported in several stratified forms: by job title, by school level, by years of administrative experience, and by years of other school experience. Instead, the survey data collected from all respondents will be briefly presented and discussed. Then, the interview data and additional literature from the fields of professional

learning, formative feedback, and principal leadership will be synthesized to present the findings of the study.

The survey responses clustered around many common qualities, both qualities that are supported by and some different from the literature. The response patterns that aligned with the literature will be discussed as well as the response clusters that diverged from the literature. Therefore, in the chapters ahead when the data are presented, the survey data from the whole group of administrators will be described first. Then, themes among the data will be aligned using responses from the interviews to lend depth to the data.

The use of a closed-ended question structure throughout the survey was intended to increase the reliability and validity of responses (Fowler, 1995). Because responses were based on feedback qualities that were already determined as effective by the literature, this format provided data that was more interpretable for descriptive analysis (Fowler, 1995). A secondary intention of the survey, beyond providing descriptive analysis and statistics about the feedback practices of participants, was to identify survey respondents who were invited to participate in semi-structured interviews. Therefore, the last survey question asked participants if they wished to be considered for an interview. Participants who wished to be considered for an interview were prompted to supply their name, email address, and phone number. They also were asked to provide additional parameters such as available times and days in a two-week window to be contacted. These semi-structured interviews revealed their in-depth perspectives on formative feedback practices and their underlying philosophies.

As survey responses were received and analyzed, interviews were conducted with survey participants whose responses indicated that they valued many of the same qualities of formative feedback that the literature also claimed as being among the most effective. While certainly, all

12 qualities of formative feedback were supported in the literature as those which effectively lead to growth, six of the 12 qualities were recommended to be a part of feedback practice by at least half of the researchers whose work was included in the literature review. Therefore, respondents whose responses indicated an overall preference for these six qualities were interviewed. These six effective formative feedback qualities were the following: (a) goal-oriented, (b) feeds forward, (c) specific, (d) comparative, (e) constructive, and (f) work-focused.

The interview stage sought more understanding about the potentially nuanced practices of principals and assistant principals who rank ordered many of the same qualities of formative feedback that are designated as most effective in the literature. In order to achieve sufficiency and saturation, the goal of this stage was to interview at least 50 percent of this sample (Seidman, 2006). A detailed explanation of the interview participants follows in an upcoming section. Generally speaking here, the semi-structured interviews asked participants to describe their formative feedback practices and underlying philosophies. Responses were coded and synthesized so that broad understandings could be described. Responses were also used to confirm the literature findings and survey responses and to suggest next steps in future research projects.

3.5.1.1 Pilot Study for Survey Questions

In order to determine the effectiveness of the survey questions and their format, a pilot study was conducted with members of the researcher's doctoral study group. The purpose of the pilot study was to ensure that the questions were clear to respondents, that the expectations for responses were appropriately communicated, that the respondents had access to the information needed to answer accurately, and that they were willing to provide answers to the questions as asked. These survey participants were all public school administrators and, therefore, were able to provide their feedback on the survey based on their professional experience. Their feedback enabled questions

to be revised and options to be streamlined so that the survey could better produce data that would inform the study's research questions.

3.5.2 Interview Data

The survey provided data on school leaders' use of and beliefs about formative feedback qualities. The interviews provided illustrative depth into the methods and process that administrators use to provide ongoing formative feedback on the effectiveness of teachers and opportunities for growth for teachers. Question 7 asked survey participants, "Are you willing to participate in a brief follow-up interview?" In the case of all "Yes" responses, the respondents' answers to Question 6 determined who would be interviewed. Question 6 asked the survey participants to assemble a list of feedback qualities that they believed were the most highly effective in leading to teacher learning. Then, the participants rank ordered their lists.

This activity not only provided data on the beliefs of administrators but it also determined which willing interview candidates reported beliefs about formative feedback qualities that reflected the literature. This was important because the intention of the interviews was to learn more about the formative feedback practices of administrators who value the same or similar formative feedback as the literature values. Each research question is addressed separately in the chapters ahead using patterns of data provided by the surveys that are related to administrators' use of and beliefs about formative feedback as well as detailed input about feedback practices that was provided by the principals who were interviewed. By first understanding the practices and beliefs of principals whose formative work with teacher learning aligns with what the literature suggests, this study is able to contribute to suggestions for next steps in principals' professional practices.

A protocol was established to determine the interview sample. The goal of the interview stage was to interview approximately 50 percent of principals whose survey responses indicated they may be strong implementers of effective formative feedback qualities. However, all principals who were identified as strong implementers by the protocol were successfully interviewed. These interviews successfully revealed information about the specific formative feedback practices, beliefs, and methods of principals who value the same effective feedback qualities as those identified in the research. The participants of these interviews will be introduced in detail next in order to provide context for the rich description that they lend to the next three chapters.

The interviews followed a semi-structured format. I developed this format intentionally to follow Mertens (2010) point that qualitative researchers generally favor semi-structured interviews so that flexibility for divergent questioning is inherent in the protocol. This format allowed the interview to accommodate for the personalities and comfort level of the participants. She also stated that informal interviewing strategies at the beginning of the interview session have been found to establish a relationship between the participant and researcher (Mertens, 2010). Because of the possibility that the participants may already have had a professional relationship with me, I chose to develop questions and prompts in a semi-structured format that I expected would establish a relaxed yet honest rapport between us.

The questions and probes in the interview protocol were developed through a multi-step process. First, the research was summarized on adult learning and professional feedback, formative instruction practices, the Pennsylvania Department of Education's supervision and evaluation expectations, and instructional leadership related to the professional development of teachers. Then, overarching topics in this literature were identified in a first draft of the literature

review in Chapter 2. A synthesis of more concise understandings of the literature was produced for the final literature review. This process of reporting and refining the literature resulted in clear themes that then served as the foundation for data collection instruments. Finally, using Seidman's (2006) guidelines, the interview questions were written to align with the research questions and themes in the literature. These questions are in Appendix D.

I contacted the interview participants via email to determine a mutually agreeable time and place for the interview. At our agreed-upon interview time, I read an opening statement requesting verbal consent to participate began the interview sequence. This statement is located in Appendix B. Verbal consent was requested to record the participants' interview responses. This was done to ensure the accuracy of the information later used for analysis and interpretation. I transcribed and coded each interview recording. All interviewees were invited to request the transcript of their interview if they wanted to read it, provide clarification to points, and/or provide revised responses based on what they said in the interview. Despite this offer made in the verbal consent portion of the interview protocol, no interviewee requested their interview transcript.

The general framework of the data analysis phase was to inductively approach the data with the intention of interpreting meaning in the practices and beliefs of a sample of interview participants whose survey responses indicated that they include highly effective formative feedback qualities. A focused coding stage identified themes from the interviews and developed relationships among the themes. This process led to the description of interpretive categories as an added dimension of analysis (Hatch, 2002). The cyclical and recursive act of reducing and then coding data from survey responses, interviews, and written content identified emerging themes (Mertens, 2010). Paramount for the researcher to make sense of the interview data was doing this process of reducing and then coding the data while also preserving essential meaning and

connections among them. Therefore, Schilling's (2006) model of qualitative data analysis was used in each stage of the data analysis process.

Schilling (2006) emphasizes how important it is for qualitative researchers to use "systematic and transparent ways for data collection, analysis, and reporting" (p. 29). Following his recommendation to identify definitions and rules guiding the analysis, descriptive categories for the data were developed through a review of the literature and formed by identifying reoccurring themes in the content of the responses. Once initial descriptive categories were established through reading, rereading, and reflection of the data, the content of each response was reduced to its basic messages. Raw data were condensed to individual units using Tesch's (1990) definition that a meaningful unit is a text segment that contains an independent idea or piece of information that is understood by itself. Schilling calls this process "paraphrasing" which is when unnecessary words are deleted so that reduced yet highly illustrative and specific material is preserved (p. 31).

The objective of this process was to identify patterns in the data and then to determine relationships among the patterns (Merriam, 2009). Hatch (2002) describes this type of analysis as "a search for patterns of meaning in data so that general statements about phenomena under investigation can be made" (p. 161). Inductive information processing is a key characteristic of qualitative research, and Schilling's process helped to ensure a systematic, careful, yet rigorous search for meaning. After all, the fundamental belief of the value of qualitative research lies in the notion that "important information is in the data, and by systematically asking the right questions of the data, that information can be revealed" (Hatch, 2002, p. 148). This careful process of data collection, reduction, categorization, and combination into meaningful interpretations guided the data analysis phase of this study. Determining relationships among the data patterns was

accomplished through memo writing. Miles and Huberman (1984) encourage the writing of memos as an important contributor to the data analysis stage. By theorizing ideas through memos, initial codes and original frameworks of meaning were challenged and areas of further investigation were formed (Miles & Huberman, 1984).

3.5.3 Characteristics of Interview Participants

Since the desire was to talk to principals whose practices and beliefs reflected the literature, the following process was used to determine which administrators to interview. Recall that at least half of the sources synthesized in the Literature Review supported six specific qualities of formative feedback. These six qualities are the following: goal-oriented, feeds forward, specific, comparative, constructive, and work-focused. The remaining six qualities of the 12 qualities offered in the survey were also supported in the literature as effectively leading to learning. However, they were discussed by fewer than half of the sources reviewed. Therefore, a natural division among all 12 qualities occurred at this halfway point, with six qualities referenced by at least half and six qualities referenced by fewer than half of the sources. Those qualities named and discussed by at least half of the sources reviewed were considered to have the strongest support in the literature and, then, became the qualities of interest for the selection of interview candidates.

In order to determine interview candidates whose responses reflected those qualities strongly supported in the literature, the following protocol was used. All respondents who ranked at least three of these six most supported qualities in their list for Question 6 were initially placed in the interview pool. Then, a secondary analysis of the order of these in the principals' ranking determined the respondents who most similarly valued the same qualities that were supported in the literature. This process yielded a group of seven candidates, and all of them were successfully

interviewed. They were all principals and represented both levels of public education. Two of them were elementary principals, and five of them were secondary principals. Their administrative experience ranged from four to 15 years and averaged 9.4 years. This average is slightly below the broader survey group whose administrative experience averaged 11.6 years. The interview participants represented an average length of other public education experience (i.e. teacher and other public school professional) of 8.1 years. This mean is very similar to the larger survey group which reported an average of 8.2 years of other school experience before becoming administrators.

The Institutional Review Board approved this study with the caveat that participants' identity would be kept anonymous. The unique characteristics of the seven participants who were interviewed made this requirement a challenge. For example, one interviewee earned several years of experience in public school in a role other than teacher. Since this is an unusual trajectory to the principalship, the researcher's advisor and study group members felt that this person might be easily identifiable. Another interviewee holds two titles, and it is possible that this combined position could be recognized by readers of this study. The decision was made to purposefully disguise the gender of the administrators and to refer to them with generic names (following the alphabet) as to achieve anonymity as approved and expected by the Institutional Review Board. The next section will introduce each principal.

3.5.4 Descriptions of Principals who were Interviewed

This section presents each interview participant by describing their position and overarching use and beliefs of formative feedback. The background of each interview participant situates their different and valuable perspectives when the data is presented in the next three chapters. I believe, too, that the descriptions contribute positively to the richness of the data and to the

impact of the findings. All future discussion of the interviewees will reference them according to the following italicized names. Many of the themes in the descriptions that follow are expanded on in the chapters ahead. This section concludes with a table, Table 1, that briefly encapsulates each principal's core message about giving formative feedback for the purpose of teacher's professional learning.

Principal Anne

After serving as an assistant principal for three years, this interviewee is now in her second year as a high school principal. Prior to this administrative experience, she was a secondary teacher for several years. Principal Anne described her use of formative feedback as being to increase the effectiveness of teachers by telling them about the effective practices of their colleagues. This principal uses this strategy in order to guide teachers in making comparisons between their own work and that of a high quality model. Principal Anne also hopes that repeated practice will enable teachers to critically and independently reflect on their own practices. She hit on an important aspect of formative feedback in that it compares the present work to a standard in order to identify the next area for improvement. While she knows that comparing excellent work to actual practice can lead to professional learning, she reported on the survey that she only occasionally includes comparative feedback in her feedback messages to teachers. Principal Anne recorded on the survey that the habit of providing positive and timely feedback are the dominant characteristics in her messages of feedback. This principal was among those interviewed because she ranked four of the top six qualities of effective formative feedback in her Top Five list. These four were feeds forward, specific, constructive, and comparative.

Principal Brian

Principal Brian reported that he is responsible for a secondary building. In particular, this principal takes an active role in evaluating and providing feedback to all non-tenured teachers. He explained the value he places on professional learning that comes after he and the teacher together identify specific areas for improvement. Knowing the specific areas in which to improve and the strategies that will lead to learning are both important characteristics of effective formative feedback. Principal Brian's survey response about his feedback messages to teachers indicate that his feedback is dominated by the identification of the next level of needed professional growth for the teacher. He was selected to be interviewed because he ranked four of the top six formative feedback qualities in his Top Five list. Three of the four characteristics that he named as most effective in leading to professional learning are messages that are goal-oriented, specific, and constructive. The fourth characteristic that Principal Brian ranked high on his list is that a feedback message should feed forward or lead the teacher to his or her next area of growth.

Principal Carol

This interviewee has been an elementary principal for nearly five years. Prior to that, she was a teacher and an intervention specialist for about 15 years. She responded on the survey that her feedback messages are dominated by a description of the episode of teaching, positivity, timeliness, a focus on the students' work, the process of the lesson, and how students engaged in the learning. When asked how she uses formative feedback to increase the effectiveness of teachers, she talked about the importance of having teachers learn together as colleagues. She explained her thinking by saying, "Communicating with each other and working through these hurdles and roadblocks is very important." Principal Carol knows that effective feedback leads a teacher to compare his or her work with highly desired standards of practice. Instead of identifying standards of practice in the literature, this principal encourages teachers to look to their colleagues

for models of effective practice. Principal Carol ranked the following feedback qualities as most likely to lead to teacher learning: descriptive, feeds forward, goal-oriented, specific, and positive.

Principal Dana

Principal Dana is a high school principal with nearly equal years of administrative experience and teaching experience. In her interview responses, she continuously tied in the importance of a teacher being actively involved in his or her own professional learning. She reported on the survey that her feedback messages are dominated by the qualities of being concrete, descriptive, focused on identifying the next level of growth for the teacher. Additionally, Principal Dana reported her strong use of timely and student-centered feedback. When asked how she generally uses formative feedback to increase the effectiveness of teachers, Principal Dana explained how she uses her walkthrough data to identify broad areas that her faculty members need to improve upon and then to develop professional learning opportunities from the information. She created professional development sessions that ask teachers to define the element of teaching that they are going to work on improving, to describe how it is successfully used in other districts and by other teachers, and then to compare this highly desired standard to the literature in order to determine strategies to try. Principal Dana's rank ordered list of highly effective feedback qualities represents her interview responses closely. She named the following qualities as most likely to lead to teacher learning: constructive, goal-oriented, specific, collegial, and descriptive.

Principal Evan

This elementary principal is in his tenth year of administration after having taught elementary students in a different district for several years. He was chosen to be interviewed for this study because he rank ordered four of the most highly effective qualities of formative feedback in his list on the survey. These four qualities of feedback are focused on the process of the lesson

and students' engagement throughout, are matched to the teacher's own professional goals, are specific, and are constructive in that they identify a specific area of needed improvement for the teacher. He also described his own feedback messages as being dominantly positive and goal-oriented. When asked in the interview to describe how he uses formative feedback to increase the effectiveness of teachers, Principal Evan referred first to the importance of delivering a positive message. He then said, "I think the most beneficial thing is just to get the conversations going. [The] bottom line is just [to] keep it going and keep it positive." While Principal Evan emphasized positivity in the interview, he rank ordered it as the fourth (out of five) most effective feedback qualities that are likely to lead to teacher learning.

Principal Felicia

Principal Felicia is a high school principal of 15 years. Prior to this administrative position, she worked at the secondary level for several years. This principal shared her belief that "we can all improve" and her responsibility to not only affirm effective teaching practices but to also communicate specific areas of needed improvement for teachers. She said, "I think always saying positive things only gets you so far," and, likewise, didn't include the feedback quality of positive in her rank ordered list of five most effective qualities of formative feedback that is most likely to result in professional learning. Instead she prioritized the feedback qualities of being aligned to individual teachers' goals, being constructive, and being focused on the work that students do to show their learning. Principal Felicia noted in both her rank ordered list and in her interview the importance of goal-driven feedback; yet, she reported only occasionally focusing on the staff member's or school's improvement goals in her feedback messages to teachers. Instead, she described her own feedback messages as being positive, specific, timely, and centered on student work.

Principal Grant

Principal Grant is a high school principal with more than a dozen years of administrative experience. He also has a dozen years of experience as a teacher and athletic coach. He referred to his coaching background several times during the interview. For example, he likened the work of principals who contribute to the learning of teachers to that of a coach who praises effort, notices the positives, and builds on strengths. In the interview, he took on the voice of a teacher to best describe the formative feedback that he provides. He said, “This guy is coaching me up. He’s not trying to tear me down. He’s not trying to find all my negatives.” Feedback qualities that Principal Grant felt would most likely lead to learning are specific, timely, constructive, positive, and oriented to the individual goals of each teacher. He described his own feedback messages as those that are dominated by a focus on the students’ work, the students’ engagement in the lesson, and a focus on the lesson’s flow.

3.5.5 Principals’ Prevailing Views of Feedback

This section provides a broad overview of principals’ perspectives on the utility and value of formative feedback. The sources that contributed to the Literature Review strongly supported these feedback qualities: goal-oriented, feeds forward, specific, comparative, constructive, and work-focused feedback qualities. Likewise, the principals who were interviewed emphasized the importance of the same qualities. These principals also emphasized qualities that held different value to them. For example, they discussed why they use positive and descriptive feedback most frequently in their feedback messages to teachers. These areas of overlap and difference will be explored in the next three chapters. Table 1 provides a brief synopsis of each interviewee’s main points about giving formative feedback to teachers for the purpose of professional learning. Many

of the themes noted here will be part of this dissertation’s discussion. There are others that would be most suitably addressed in a future study on formative feedback.

Table 1: Principals’ Prevailing Views of Feedback

Interview Participant	Prevailing View of Formative Feedback and Teacher Learning
Principal Anne: Assistant Principal with 3 years of administrative experience	<ul style="list-style-type: none"> • Formative feedback should be concrete yet transferable. • When creating and delivering feedback, the principal should model the behaviors of reflection.
Principal Brian: Secondary Principal with 12 years of administrative experience	<ul style="list-style-type: none"> • The process of producing, discussing feedback, and responding to connects the principal and teacher as fellow learners.
Principal Carol: Elementary principal with 5 years of administrative experience	<ul style="list-style-type: none"> • Effective feedback helps the teacher to see him/herself in action so that the teacher can critically reflect on teaching practices. • Effective feedback will build capacity among teachers
Principal Dana: Secondary Principal with 6 years of administrative experience	<ul style="list-style-type: none"> • Giving effective formative feedback is a skill that needs honed. It is not an inherent leadership practice. • It is the principal’s responsibility to make the next step of teacher learning explicit and then to ensure that it is being done.
Principal Evan: Elementary Principal with 10 years of administrative experience	<ul style="list-style-type: none"> • Formative feedback should nourish a growth-mindedness among principals and teachers that leads to reciprocal learning relationships.
Principal Felicia: Secondary Principal with 15 years of administrative experience	<ul style="list-style-type: none"> • Formative feedback helps to fill teaching deficits; the focus of principal feedback to teachers should be on that. • Principals who provide high quality formative feedback model important professional behaviors including reflecting, learning, and risk-taking.
Principal Grant: Secondary Principal with 13 years of administrative experience	<ul style="list-style-type: none"> • Effective formative feedback builds on teachers’ strengths, builds their confidence, leads to teacher and student learning, and encourages teachers to take risks in their efforts to improve.

3.6 LIMITATIONS AND ASSUMPTIONS OF THE STUDY

The initial data collection instrument, the survey, was sent to principals and assistant principals. The choice to avail the survey to a possible population of just over 100 administrators might have been a limitation because only about half of that population participated in the survey. Despite this, the invitation to participate explained that the survey would take ten minutes or fewer in the

hope that this encouraged participation. The second invitation to the survey specifically explained that the average length of time that respondents took to answer was 7.5 minutes. (A number of surveys were completed that evening alone.) The survey also asked if participants would be willing to participate in a brief follow-up interview. While there was the possibility that each interview question would have several additional probes, the intention was to conduct the interview as more of a collegial conversation rather than with a strict, formal protocol. It was also the intention to limit the interview, if possible, to thirty minutes and to schedule the interview by phone to be as convenient as possible.

Another important limitation was the possibility that respondents would not share their opinions and experiences honestly. Perhaps the researcher's position as fellow principal might have dissuaded the principals to participate openly. Perhaps principals felt the need to respond in such a way that their answers were deemed "correct" or preferable in some way. To reduce this potential limitation, the survey and interview prompts were worded so that participants would not feel like they were being quizzed on knowledge but rather that their experiences were being gathered. The invitation to participate in the survey explicitly stated that all data would remain confidential, would not be shared with supervisors, and would be used for research purposes only. This information was also verbally shared by the researcher during the planned opening remarks of the interview. Additionally, an explanation of how the interviewees were selected based on their ranking of highly effective formative feedback qualities was intentionally planned to encourage honest and confident responses.

Another assumption was that the data collected and analyzed would relate to Schön's (1983) description of the reflective practitioner. Schön argued that critical reflection, either in the moment of action or shortly afterwards, leads to professional learning. This perspective was

especially relevant to responses gathered by the study because of the deeply internalized and often automatic process that results in creating and learning from formative feedback. Schön's work provided a foundation for interpretation and recommendation of next steps.

3.7 CONCLUSION

While the brief descriptions of each interview participant in Table 1 above initially evidence similarities and differences in professional opinions and practices, the most compelling themes drawn from the interviews are presented in the chapters ahead. This study describes formative feedback beliefs and practices of principals and assistant principals who seek to contribute to the professional learning of teachers, as expected in *The Framework for Leadership* and the Educator Effectiveness system (Pennsylvania Department of Education, 2014b). This study was conducted with the intent that school administrators, collectively, can have the positive effect on student achievement that the literature suggests can happen. After all, it is a professional's daily practice to learn and grow (Schön, 1983). Administrators, additionally, are partly responsible for teachers' professional growth and are expected to provide formative feedback that leads to learning.

The next three chapters are aligned to the three research questions. The first research question is, "What do principals identify as the qualities they include in their formative feedback to teachers?" Therefore, Chapter 4 focuses on these self-reported qualities and the estimates of usage that principals provided in the survey and interviews. Analysis of these two data points will show that administrators, overall, routinely use descriptive and work-focused qualities in their dominantly positive feedback messages to teachers.

The second research question is, “What do principals identify as the qualities of feedback that most effectively contribute to teachers’ professional learning?” Chapter 5 addresses this question by synthesizing what principals and assistant principals rank ordered as the qualities of formative feedback that they believe will most likely lead to the professional learning of teachers. The analysis and discussion of both survey and interview data will show that administrators value the qualities of constructive and goal-oriented feedback. These two qualities are likewise named in the literature as valuable in leading to professional learning.

Chapter 6 presents information about the formative feedback practices of principals as they use formative feedback to help teachers improve. This chapter answers the third research question which is “What are the ways that principals provide ongoing formative feedback on the effectiveness of teachers and opportunities for growth of teachers?” The discussion of principals’ feedback practices is drawn from the interviews during which the principals emphasized the importance of developing and communicating individualized feedback that is designed specifically for each teacher’s needs.

4.0 ADMINISTRATORS USE POSITIVE, WORK-FOCUSED, AND DESCRIPTIVE QUALITIES MOST FREQUENTLY IN THEIR FORMATIVE FEEDBACK TO TEACHERS

The first research question was “What do principals identify as the qualities they include in their formative feedback messages to teachers?” On the survey and in the interviews, administrators rated the frequency of their own use of certain feedback qualities and described their feedback practices. They used a list of qualities that was drawn from the literature on the topic of formative feedback. These qualities were all supported by research studies, professional papers, and practitioner articles as effectively contributing to the professional learning of teachers (Black & Wiliam, 1998; Brookhart, 2008; Brookhart & Moss, 2015; Butler & Winne, 1995; Clark, 2012; Garrison, 1997; Hattie & Timperley, 2007; Kluger & DeNisi, 1996; Locke & Latham, 2002; Locke & Latham, 2006; Moss & Brookhart, 2015; Sadler, 1989; Schön, 1983; Shute, 2008). Among the 12 named qualities of effective feedback, 50 percent or more of the sources reviewed for this study discussed six common qualities. These six qualities of effective formative feedback are goal-oriented, feeds forward, specific, comparative, constructive, and work-focused. Feedback that contains these qualities is aligned to individual teachers’ goals, focused on what new knowledge the students are able to demonstrate as a result of the lesson, and able to identify areas for the teacher’s improvement by comparing the teachers’ actual work with what is considered “best practice” in the field.

Survey Question 5 prompted respondents’ reflection on the feedback they offer by asking them to think of recent episodes in which they have provided verbal or written input to teachers. Then, the respondents were asked to rate the degree to which they included each given quality in the written or verbal feedback messages. They rated their degree of use among five answer choices which ranged from “not included” to “was the dominant characteristic.” Intermediary options that respondents could also choose were “rarely included,” “occasionally included,” and “routinely included.” The complete question is shown in Appendix C, along with the other survey items.

Section 4.1 presents what administrators described as being the most and least dominant qualities of their formative feedback messages to teachers. The averages reported in the tables throughout this section are on a 5.0 scale as represented and explained below:

Table 2: Scale Used to Report Response Averages

Feedback Quality	was not included	was rarely included	was occasionally included	was routinely included	was the dominant characteristic
Quality X	1 point	2 points	3 points	4 points	5 points

Responses that earned five points were placed in the “was the dominant characteristic” response category. Therefore, average scores closest to 5.0 indicated the strongest reported use of a feedback quality. The next few paragraphs show that, among all respondents, the feedback quality of positive received the highest average score of 4.28 on a 5.0 scale. Conversely, responses in the “was not included” range contributed to the overall average with one point. The quality receiving the lowest average on the survey was collegial with a mean score of 3.13 on a 5.0 scale. Responses to the other ten qualities averaged between these high and low means. While the next section generally explains the survey data patterns, section 5.2 situate the scores in relation to themes presented in the interview data.

4.1 SURVEY RESPONSE PATTERNS

As many as 40 survey respondents reported their use of formative feedback qualities in their verbal and written feedback messages to teachers. For 11 of the 12 qualities that were listed, the respondents reported “was routinely included” more frequently than any other answer choice. “Routinely included” was the fourth highest of five increments available to rate the presence of each quality in feedback messages. Across all 12 qualities and all 46 respondents, this answer choice was selected 253 times or 53% of the time. The answer choice “was occasionally included” received the next highest number of selections. It was selected 100 times or 21% of the time. The answer option of “was the dominant characteristic” which was selected 83 times, representing 18% of the overall responses.

The remaining two categories were “was rarely included” and “was not included.” Responses to these descriptors amounted to 26 (6%) and 4 (1%) respectively and represented a limited presence in the self-reported practices of these public school administrators. Ninety-two percent of all ratings of the use of the given feedback qualities fell among the three highest possible reporting levels which represented occasional, routine, and pervasive use. In summary, the participants of this survey reported routine use of the 12 highly effective qualities more than half of the time when they provide formative feedback to teachers for the purpose of professional learning. Table 3 shows the number and percentage of responses to each quality across all response options for Survey Question 5.

Table 3: Number and Percentage of Responses to Survey Question 5

	Was not included # (%)	Was rarely included # (%)	Was occasionally included # (%)	Was routinely included # (%)	Was the dominant characteristic # (%)	TOTAL RESPONSES	MEAN (5.0 scale)
Collegial	3 (8%)	5 (13%)	16 (40%)	16 (40%)	0	40	3.1
Comparative	0	3 (8%)	8 (21%)	27 (69%)	1 (3%)	39	3.7
Concrete	0	1 (3%)	5 (13%)	26 (68%)	6 (16%)	38	4.0
Constructive	0	2 (5%)	6 (15%)	23 (59%)	8 (21%)	39	4.0
Descriptive	0	1 (3%)	4 (11%)	23 (61%)	10 (26%)	38	4.1
Feeds Forward	0	5 (13%)	13 (33%)	13 (33%)	8 (21%)	39	3.6
Goal-oriented	0	5 (13%)	10 (26%)	20 (51%)	4 (10%)	39	3.6
Positive	0	0	1 (3%)	26 (67%)	12 (31%)	39	4.6
Process-focused	0	1 (3%)	9 (23%)	23 (59%)	6 (15%)	39	3.9
Specific	1(3%)	3 (8%)	12 (32%)	18 (47%)	4 (11%)	38	3.6
Timely	0	0	10 (26%)	19 (49%)	10 (26%)	39	4.0
Work-Focused	0	0	6 (15%)	19 (49%)	14 (36%)	39	4.2

4.1.1 Summary of Survey Responses

Administrators reported the qualities of positive, work-focused, and descriptive as three qualities they use most often in their feedback messages to teachers. The respondents who were principals described their feedback to teachers as dominated by messages that name strengths (positive) and focus on what the students are doing (work-focused), whereas assistant principals reported that their feedback to teachers mainly describes the episode that was observed (descriptive) and then identifies a specific area that needs improving (constructive). The highest ranked qualities reported by secondary principals were the same as those reported by the whole group. These were positive and work-focused. However, elementary administrators reported that they communicate feedback messages that are first and foremost descriptive, which means feedback that objectively describes the episode of teaching. Elementary administrators then rated positive as the second strongest quality in their messages to teachers.

The participants' self-assessment of their incorporation of collegial feedback was an outlier among the clustered ratings of other feedback qualities. Collegial feedback is the feedback that

situates both the principal and teacher as learners. For this quality, 24 (60%) respondents reported usage at the three lowest levels. Three respondents (8%) marked that collegial feedback “was not included,” five (13%) respondents answered that it “was rarely included,” and 16 (40%) respondents reported that it “was occasionally included” in their messages of feedback to teachers. Sixteen (40%) other respondents selected the most used overall option of “was routinely included.” No respondent answered that collegial feedback was a dominant characteristic of their feedback message to teachers.

Collegial feedback also received the most ratings of “was not included” among all qualities. In other words, three (8%) respondents recognized that, in the feedback messages they could recall, they did not produce feedback messages that situated teachers and principals as fellow learners. Overall responses to collegial feedback were the only exception to the popular selection of “was routinely included.” It is interesting to note that this particular quality continued to receive low response rates despite the stratification of data into job title, school level, and years of experience. However, all seven principals who were interviewed expressed how much they learned as a result of forming and providing formative feedback.

4.1.2 Concluding Discussion

Six feedback qualities were situated as the more strongly supported group of qualities in the previous chapter. These six qualities are goal-oriented, feeds forward, specific, comparative, constructive, and work-focused. This distinction was originally made in order to select interview candidates whose survey responses aligned with the qualities that were most strongly supported by the literature. The merit of these six qualities is applied again here, in light of respondents’ reported usage of these qualities of formative feedback.

None of the six qualities that are among the most strongly supported by the literature were reported as being the most frequently used in administrators' feedback messages to teachers. The three qualities that earned the highest mean score by all response groups were positive, work-focused, and descriptive. Of these three, only work-focused is supported by at least half of the sources in the Literature Review. The survey participants reported minimal usage of the six formative feedback qualities that the literature supports as being among the most effective in leading to teacher learning. The survey participants reported frequent use of qualities that are not as strongly supported. This dynamic is explored in the next section.

Since this chapter seeks to explore the research question, "What do principals identify as the qualities they include in their formative feedback to teachers," the next section will synthesize the principals' perspectives on effective formative feedback qualities. The following discussion will present the substance of practitioners' experiences and related findings in the literature in order to understand why positivity, a focus on the students' work, and objective description of instruction were ranked among the strongest qualities that administrators routinely incorporate in their formative feedback to teachers.

4.2 DISCUSSION OF THE QUALITIES THAT ADMINISTRATORS USE MOST FREQUENTLY

To be formative, or to lead to learning, feedback messages should describe the current level of work, compare the work to highly regarded standards of practice, communicate where improvements need to be made, and suggest strategies to make the needed improvements (Ramaprasad, 1983; Shute, 2008). These components were discussed in the literature review and

bear repeating throughout the discussion of each research question. Somewhat different from the research on formative feedback (Black & Wiliam, 1998; Brookhart, 2008; Brookhart & Moss, 2015; Butler & Winne, 1995; Clark, 2012; Garrison, 1997; Hattie & Timperley, 2007; Kluger & DeNisi, 1996; Locke & Latham, 2002; Locke & Latham, 2006; Moss & Brookhart, 2015; Sadler, 1989; Schön, 1983; Shute, 2008), administrators reported that their feedback messages are positive, focus on what the students are doing in order to determine the effectiveness of the teaching, and describe what is observed during the classroom visit. Therefore, this section discusses each highly rated quality individually using content from the interviews to explore why administrators choose to include it in their formative feedback messages to teachers.

4.2.1 Formative Feedback that is Positive

Survey participants reported that their formative feedback to teachers is very often positive. In fact, 37 out of 39 (95%) survey respondents placed their use of positive messages in one of the two strongest response categories which were “was routinely included” and “was the dominant characteristic.” The quality of positive received the highest number of responses at these two levels among all 12 qualities listed on the survey. Principals who were interviewed talked enthusiastically about the value they find in offering positive feedback. They described uses of positive feedback that ranged from affirming teachers’ good work so they focus on the process of their teaching, to using positive messages as a segue into a discussion of the next level of needed work for the teacher, and also to consciously build a culture of trust and support between teachers and administrators so that future professional learning may be more possible. A third of the sources reviewed for this study mentioned positive feedback as being an effective contributor to

learning (Black & Wiliam, 1998; Brookhart, 2008; Brookhart & Moss, 2015; Kluger & DeNisi, 1996; Moss & Brookhart, 2015).

4.2.1.1 Positive Feedback that Helps Teachers Focus on the Process and not on Themselves

The first benefit of positive feedback that the principals described is that it helps teachers focus on the process of their teaching. Principal Carol suggested that the need to validate positives comes from the current realities of standardized assessment and evaluation that exist in Pennsylvania public schools. She said, “I think sometimes, as educators with high stakes testing, we often look at what [teachers] need to fix... I am a true believer in [that] we still need to find positive pieces in that lesson. We need to give them formative feedback on that positive piece and why we like it.” Principal Carol hit upon an important point when she referenced the three-steps of noticing the positive attributes of a teaching episode, describing them explicitly in formative feedback messages, and then explaining why they are so successful. By making effective standards of practice clear in feedback messages, teachers may be able to independently compare their future work against the ideal characteristics in order to determine its overall quality. This is an important behavior of reflective practitioners (Korthagen, 2001) as discussed in the Literature Review and expanded on below.

Reflecting this sentiment, Principal Felicia cautioned against administrators maintaining a belief that positive feedback by itself will lead to professional learning. She said, “I think always saying positive things only gets you so far. I think you have to get into some constructive feedback for people so they can latch on to things that they know they need to do a better job [of doing.]” Interestingly, this principal was the only one who moved into an administrative position without first having been a teacher. She talked about her own realization that she’d need to learn quickly with critical input she received from a university professor. She was told, “You’re going to have

to focus in on the instructional strategies and gaining ground with your teachers because you haven't been in the trenches, so to speak.” As a result, she prioritizes her own reading and learning in order to stay ahead of the curve. This skill-building mindset is always present when she gives professional feedback to her teachers. Principal Felicia is intentional in how she demonstrates her own critical reflection behaviors. She explained that, through her internal and external acts of reflecting on her process of leading and learning, she focuses her efforts on making sure that teachers can identify their areas of improvement so that they can likewise practice independently and deliberately.

Khachatryan (2015) published an article about the perceptions that teachers have on the feedback messages that administrators produce for them. He established in the research that positive or negative personal feedback on the teacher results in decreased performance. However, positive or negative feedback on the task has more of a potential to increase performance since it focuses on how well the teacher did or did not achieve the goal. Khachatryan (2015) also noted in his study that feedback on the process of teaching and feedback on the demonstrations of students' learning serve to validate teachers. This validation, according to Khachatryan (2015), has a greater chance of leading to learning since teachers find the comments to be motivating and affirming. Teachers reported a willingness to try to improve when both the process and the product of the observed episode of teaching was delivered in the feedback message by the principals. Khachatryan (2015) concluded with the summary, “Breaking down the steps in instructional moves and communicating them to teachers would make clear which components of their practice may need attending, refining, and improvement” (p. 183).

The skill of reflecting critically is an essential one to develop, and Korthagen (2001; 2010) provides a framework. He uses the conceptualization of a three-leveled system to explain how

professionals, like teachers, can turn immediate, second-by-second experiences into long-term, deeply held learning through critical reflection. Ultimately, Korthagen explains that the goal is for teachers to embed new learning in their practice so that their immediate reactions during classroom instruction and management evidence their knowledge. Korthagen argued that this can be done if new learning is offered and received at the most effective level of learning. This level is one in which the learner already has experiences and strives to locate them within a structure. In other words, it is through active, willing, and deliberate reflection on the process and product of teaching that this knowledge is connected and organized.

Principal Brian mentioned the phrase “active participant” many times throughout the interview as he described the level of engagement he needs to have from his teachers when they critically reflect on their practices. Principal Dana talked about the importance of leading her teachers in a way that “they accept [the feedback] and own it a little bit.” Principal Evan explained that he notices reflection occurring when he sees that the teachers at his school are working collaboratively. Principal Felicia shared that one of the best professional learning exercises she has led at her school was when the administrative team asked each teacher to share a strategy that worked in their classrooms. She said, “Where I noticed the growth was when I went to another classroom and saw a teacher taking someone else’s strategy and putting it into their own [practice.]” It is in noticing, naming, and explaining the value of the positives that principals engage teachers, model the behaviors of a reflective practitioner, and develop the teachers’ capacity to compare their own work to high quality examples of effective practice. For example, Principal Grant summarized his task to build from positives by saying, “I think one very, very important piece of it is finding the positives. If you can reinforce positives and celebrate positives with other people, I think that develops confidence.” He connected this increase in “confidence”

to a readiness to improve. This sentiment leads to a second interpretation of positive as an effective formative feedback quality. This is when a teacher recognizes his or her next level of work after first recognizing what he or she is doing well.

4.2.1.2 Positive Feedback that Identifies Teachers' Next Level of Growth

In the interviews, several principals talked about including positivity in their feedback messages as a deliberate strategy to help a teacher accept accompanying constructive messages of needed improvement. Principal Evan said that he uses it in order to get important conversations started and then to keep them going. Principal Felicia is so careful to position her feedback within a positive context that she has only recently begun taking her computer when she conducts walkthroughs. Her change in habit came about only because of the need to document her visits in the online evaluation system. She explained, “It kind of felt like it was a little impersonal going in there with a laptop and typing away”; however, she has since realized the value of taking specific and illustrative notes. Principal Grant added, “I think we can always correct errors, but I think we have to build on strengths in whatever we do. No one likes to hear only what they do poorly. When you frame that area for improvement, with all those positives, it’s more beneficial for a teacher.” Principal Anne shared a similar perspective when she said, “Part of [helping a teacher grow] would tie into connecting the good with the areas of growth. I try to be like, ‘You do a good job of developing the Personal-Social Domain. You build relationships; you communicate with kids on their level. So when you are giving kids feedback on their rough drafts of an essay, continue to use those relationships to [do the same thing, only in writing]’.” Through this example, she modeled in the interview how she uses her observations of effective skills to segue into a recommendation of what the teacher can do next to improve.

Hattie (2012) discussed the effect of feedback on achievement such as when positive relations enable a feedback message to be received and used. It is important to note that Hattie uses the phrase “positive affiliative relations between peers” to express the nature of this connection. While “positive” and even “affiliative” fairly represent the relationship sought by the principals who were interviewed for this study, the “peers” part of the phrase is an important element to recognize. These principals, by and large, seemed to acknowledge the challenges inherent in their multi-dimensional relationship with teachers. All at the same time, principals are trying to nourish and sustain relationships with teachers as fellow learners, daily supervisors, and annual evaluators.

The relationship between teachers and principals who seek to provide formative feedback that will help the teacher grow professionally was made clear in interviewees’ first answer. This question asked principals to describe a time that they gave formative feedback to a teacher. All seven participants were immediately able to describe a recent scenario in which a teacher needed to improve a specific area of his or her practice. In some cases, it was student engagement, in others it was a lack of progress towards a building or District initiative, and in others it was stakeholder feedback that uncovered a concern. Five of the participants described a situation involving an experienced teacher, and two others described a formative interaction with a novice teacher. In all cases, the principals expressed the sense of urgency that they felt in moving the teacher toward reflection and ultimate correction of the concern. Despite their sense of urgency, many of them explained that they chose not to act in an authoritative manner at first but instead engaged the teacher in dialogue.

Principal Dana spoke specifically about helping teachers to reflect on their own practices. She said, “The hardest part, I’ve found, is that a lot of teachers over the course of 15 to 20 years

have never been asked ‘What do you think about yourself?’” This may be true as well for very new teachers. Principal Brian talked about his role as the evaluator of non-tenured teachers. He knows that he needs to help them build self-reflection and assessment skills. To do so, he engages them in frequent dialogue during which they need to share what they are thinking about their practice. He said, “We always talk about that: ‘If there was one thing or two things that you feel you can improve upon... Now tell me what you think your strengths and weaknesses are.’” Principal Anne used an example of a formative feedback discussion with a non-tenured teacher in her interview to explain that she waits to hear the teacher’s own points of reflection in order to “invest more time in writing suggestions because [the teacher’s points] might have more value.” She acknowledges that capitalizing on the value of what the teachers suggest is an important way to support and affirm their efforts to reflect on their practice and communicate their reflection to their supervisor.

Principal Grant said that he “asked [the teacher] to think about what it is he wants students to know and be able to do.” He then asked the teacher how the students’ learning is apparent and how their learning is acknowledged in the rubric. Principal Felicia elaborated on the work she put into helping a teacher gain the knowledge he needed to improve. She said, “My idea with this particular person was to work long and hard on those strategies that get him to that point. We went through videotapes; we went through feedback from other colleagues; we went through visiting other teachers; we went through visiting other places. All those things to see how [teachers] posed questions.” Principal Dana described how she clearly set an expectation for the teacher but coupled it with an offer of assistance when she said, “The next time I come in, I want to see you using this rubric in this manner. If you have any questions on that, I’ll come in and I’ll do it with you.”

At many points during the seven interviews, the principals shared with me their strategies to guide teachers to identify their own next levels of professional growth through questioning and discussion. For example, Principal Dana said, “I always try to lead them to it and not force it down their throats so they understand there’s a need for it.” There seemed to be a strong opinion that taking an authoritative stance when giving formative feedback is not appropriate or productive. Still, several principals explained how their behavior and mode of communication with teachers would change if teaching behaviors and outcomes were not improved. In fact, the term “up the ante” was used in the responses of nearly half the interview group to connote more formalized communication, more face-to-face meetings, and more frequent visits to the classroom. The mixture of principal roles is illustrated in these examples. Principals act as facilitators who guide critical reflection, teachers who help the educators make needed improvements, supervisors who noted weaknesses but offered professional assistance.

4.2.1.3 Positive Feedback that Builds a Productive School Culture

A third way that principals use the quality of positivity in their discussions of formative feedback is to build a productive school culture that contributes as much as possible to a collaborative relationship between all adults in the school. Several principals commented on how offering positive feedback helped their teachers feel comfortable taking risks and trusting that the principal will be patient with the outcomes. Principal Evan said, “I let [teachers] know that risk-taking is a positive... because that creates a lot of new ideas and excitement. It makes it better learning for our kids. Bottom line is just keep it going and keep it positive.” Principal Grant, likewise, spoke about his district’s “growth-minded” focus. He explained that this focus emphasizes students’ ability to relearn and retest. It seemed, in the way he described his leadership style, he believed the same should be true for teachers. He said, “I believe that wherever you are,

we can make it better. It's not that it's right or wrong. It's 'Here's where we are. What can we do better?'" Embedded in these perspectives, and explicitly commented on in other portions of the interviews, is the belief that offering feedback in a positive, supportive manner will enable teachers to see their next areas of growth as professionally fulfilling rather than as shortcomings that need fixed (Brookhart & Moss, 2015; Sullivan & Glanz, 2009).

Levy and Thompson (2012) explored the nature of feedback in organizations in order to understand how individuals respond best to feedback that is given within a social context. They use the term "feedback environment" to describe an organizational culture wherein employees constantly receive feedback, request it, and use it to improve their job performance. An optimal feedback environment depends on a climate of continuous learning (London & Smither, 2002). Working in such a culture has been shown to improve the functioning of the whole organization. The leadership that sustains such a focus on developing a healthy feedback environment depends, in part, on the personality of the leader (Latham, Cheng, & Macpherson, 2012). Leaders need to believe that abilities can strengthen and that performance can improve. This attitude was heard through the answers of several principals. For example, Principal Carol described a new teacher by saying, "She wasn't there on her own yet." The phrase "on her own yet" is a powerful indicator of this principal's leadership perspective that a teacher needs to be supported in order for her ability and independence to improve. Principal Brian explained his work with a teacher by saying, "Not only were we doing a research project to improve his classroom instruction, but it was a research project for myself. Everything we did, we did together." This leader not only saw the potential learning in the teacher he supported, he also saw his own potential learning as a result of the shared commitment. Principal Evan spoke directly about using positive input as a way to sustain an environment that is feedback-rich. He expects to learn from the critical reflection of his teachers

and says, “When they are doing their own reflecting, they’re feeding [me] forward. The big thing is they have to know that I’m going to support that next step. If we take the next step and we have problems, that’s okay. We’re going to work together to get through them.”

4.2.2 Formative Feedback that is Work-Focused

Formative feedback that is work-focused is centered on what the students do, make, say, and/or write. The literature on feedback in the field of education supports the notion that an administrator can see areas of strength and need in a teacher’s practice when he or she watches the students at work (Black & Wiliam, 1998; Brookhart, 2008; Brookhart & Moss, 2013; Hattie & Timperley, 2007; Sadler, 1998; Shute, 2008). Thirty-three (85%) of 39 survey respondents rated their use of work-focused feedback at the two highest levels which were “was routinely included” and “was the dominant characteristic.” The remaining six respondents reported their use as being occasional. All seven interviewees mentioned that they pay attention to students first so that they can help teachers become more effective.

Grissom et al. studied effective instructional time use by school leaders. In doing so, they concluded that walkthroughs “are a substantial part (almost half) of all the time principals spend on instruction. Schools may be better served if principals spend more time using the information for school improvement than collecting it” (Grissom et al., 2013, p. 442). One way to use walkthrough data for professional learning is to focus the formative feedback on applicable points of practice instead of lesson-specific concerns. Hattie (2012) suggested that a focus on the effectiveness of practice will move administrators from talking about how to teach to talking about how to learn. By looking for what the students need, both principals and teachers are similarly focused and aiming for the same goal (Moss & Brookhart, 2013).

An example of looking for what students need was provided by Principal Carol. She explained how student-watching is a very common practice for her. She once asked a teacher to pinpoint the purpose of the lesson and then elaborated, “We talked about how she was measuring, if she was measuring, the progress as [the students] went from activity to activity.” Then, Principal Carol explicitly guided the teacher to “think deliberately about what she was teaching and if she was looking back on what the students were doing.” In a follow-up meeting with the teacher after a classroom visit, she made the overall point that “You need to be comfortable changing the lesson to meet your students’ needs and not to keep it going because I’m there.”

Another benefit of watching what the students are doing during a classroom visit is that the administrator is able to learn. Moss and Brookhart (2013) position the administrators who conduct walkthroughs as lead learners. In their model, administrators watch the classroom goings-on from the students’ perspective in order to “assess and strengthen their own knowledge and skill, reveal and challenge their assumptions about student learning, and use what they learn to promote future-focused and evidence-based collaborative conversations” (p. 44). The authors explain that watching what the students are actually saying, doing, writing, and making during classroom visits will afford administrators the skills and perceptions to be able to help teachers grow in the ways that will raise student achievement.

Moss and Brookhart’s (2013) perspective on the value of walkthroughs that focus on the students helps to situate several interviewees’ answers. One of the interview prompts asked principals to describe a feedback episode that identified a teacher’s area of needed improvement. When they explained the nature of the feedback they provided to help the teachers address the issues, each principal used a student’s perspective in order to situate the feedback into a transferable learning moment. These are the teaching issues that were mentioned: One teacher

asked low-level questions that lacked rigor and relevance. Another teacher assigned writing prompts for the purpose of PSSA preparation that weren't compelling to his students. A third teacher was using instructional strategies that were more appropriate for his previous year's high school students than his current year's primary grade students. A fourth teacher was spending instructional time on activities that the students already knew how to do. While the four areas of concern were all different, each principal responded to the individual circumstances with the same focus of student engagement. They could only have done this by watching the lessons from the students' perspectives. The students weren't engaged and, therefore, were not committed to the instructional goals that the teachers had set.

Korthagen (2001) explains the value in principals offering feedback after first watching the students and then considering the teaching practices being used. He first criticizes what he calls a "dominant" view of teachers. This view assumes that teachers develop a theory about a situation, then interpret each future and similar situation through the same theory, and rationally decide to act in the same manner that they acted in the original situation. Instead, Korthagen argues that the nature of the classroom requires a teacher to immediately assimilate perception, interpretation, and reaction into one teaching moment that depends as much on cognition as it does on feelings, values, needs, concerns, and routines. This causes a teacher to react almost automatically and without the need to think about each decision. What can happen is that teachers learn to automatically respond and stop critically reflecting on their practice. Critical reflection is reignited when teachers' dependence on their unconscious reactions is questioned, threatened, or proven unsatisfactory.

Using the examples above, a teacher might not accept a principal's feedback to ask more rigorous, high level questions because he unconsciously produces them without reflecting on his practice. So, it is with the introduction of the student engagement concern, for example, that the

teacher chooses to reflect on what is making the students disengage, possibly attempt to justify his actions, later take responsibility for the reality of the students' lack of engagement, and then begin to create a new plan for future, similar situations.

4.2.3 Formative Feedback that is Descriptive

Descriptive feedback is the last quality that will be discussed in this chapter. This type of feedback objectively describes the lesson in order to present a “snapshot” of the goings-on. Along with positive and work-focused, administrators reported strong use of description when they provide formative feedback to teachers. Thirty-three (87%) of 38 respondents rated descriptive feedback as either being routinely present or dominant in their feedback messages. Four (11%) respondents reported occasional use, and one (3%) respondent reported rare use of descriptive feedback. Descriptive feedback is supported in the literature as being a way to help the teacher reflect critically on the description in order to evaluate its effectiveness or compare his or her work to a high quality model or to (Brookhart, 2008; Brookhart & Moss, 2015; Moss & Brookhart, 2015; Shute, 2008).

Principal Carol explained, “Throughout the first part of the observation, I was pretty detailed [when I wrote the observation notes]. I’ve been trying to break away from being as detailed, but I thought it was important for her to be able to read through the entire process of what she taught. It was literally a running record of the lesson.” Principal Dana specifically mentioned using the Charlotte Danielson *Framework for Teaching* as a guide during formative conferences. She explained, “We looked at the Danielson model, and one of those things that we differed on was [the component related to] student assessment.” Principal Dana was able to refer to the

defined standard for practice in *The Framework for Teaching* so that the teacher would understand what achievement of the standard looked like (Danielson, 2011).

Interestingly, descriptive feedback does not always need to come from the principal who completed the walkthrough or observation. In fact, two principals explained that they have used description provided by other stakeholders. Principal Felicia explained that it was through student and parent feedback that a teacher could finally see the importance of improving. She said, “There were a lot of students coming back saying, ‘We’re just not getting what we need at the next level.’” Another principal also capitalized on student feedback to help a teacher feel an urgency to change. He said, “The students did a writing prompt, and they talked about a particular class. The majority of kids came back and said that they weren’t being inspired. They didn’t enjoy the class. I thought it was fair for the teacher to see what were some of the things that they were concerned about.”

While descriptive feedback helps compare a teacher’s practice with high quality standards or expectations, it is also used as a mirror, of sorts, that enables a teacher to see his or her work. Several principals spoke in the interviews about the joy of having teachers invite them into their classrooms in order to provide descriptive feedback on something new that they are trying. Principal Grant talked about his own learning when a teacher asks him to provide feedback for this purpose. He said, “That’s something to celebrate... When you have teachers who feel comfortable taking that risk.” However, since it is true that not all teachers feel comfortable asking their evaluator to provide feedback on a new skill, the literature on effective supervision practices has recently named the principal as the one responsible for connecting teachers in collaborative units rather than directly providing the feedback (Derrington, 2011; Desimone, 2009; Hattie, 2012). Derrington (2011) explains the value of principals using their administrative influence to involve other staff and stakeholders in the feedback process. This is reminiscent of Hattie’s (2012)

recommendation, shared earlier, that feedback should come from “positive affiliative relations between peers” so that it will effectively impact student achievement. Hargreaves and Fullan (2012), in their work on professional capital, point out the value and the leader’s responsibility of getting the right kind of people to have the right kind of interactions and relationships.

Several principals talked in the interviews about using descriptive feedback data to plan professional development sessions with groups of teachers. Principal Dana explained, “If [the administrative team has] gone through 40 different classroom sessions and we haven’t seen any effective closing activities, then whenever we plan our professional development for the month, that’s our focus.” She then described the session as being first introduced by the walkthrough data, then informed by research and practice, and finally conducted through small group discussions of appropriate and effective implementation. Principal Felicia mentioned asking teachers to share with their colleagues at a professional development session and then asking all faculty members to formally choose a strategy to try in their own classrooms. Principal Carol explained the necessity of encouraging her teachers to share what they are working on and what they have accomplished in their professional learning.

4.3 CONCLUSION

The first research question sought to understand what principal say they use in the formative feedback messages to teachers. Administrators reported on the survey that they use positive, work-focused, and descriptive feedback. The principals who were interviewed described the outcome of all three qualities as being that the teachers learn and that they learn. Grissom et al. (2013) cautioned that, to be called “feedback,” a message can’t just gather information (descriptive) or

affirm (positive) what is happening in a classroom (work-focused), it must lead to learning. The interviews provided important information on this necessary outcome.

If positive, work-focused, and descriptive feedback lead teachers to learn, then what qualities of feedback result in teachers' learning? The next chapter addresses the second research question about the qualities of formative feedback that administrators believe are most effective in helping teachers learn. These qualities are goal-oriented and constructive.

5.0 ADMINISTRATORS VALUE CONSTRUCTIVE AND GOAL-ORIENTED FEEDBACK AS EFFECTIVE CONTRIBUTORS TO THE PROFESSIONAL GROWTH OF TEACHERS

This chapter addresses the second research question which was, “What do principals identify as the qualities of feedback that most effectively contribute to teachers’ professional learning?” In order to answer this question, a survey item prompted participants to select five qualities from a given list that they believed contribute most to teacher learning. A review of the literature determined the list of 12 qualities that was provided to survey participants for this survey item, and they are the following: collegial, comparative, concrete, constructive, descriptive, feeds forward, goal-oriented, positive, process-focused, specific, timely, and work-focused.

The data are first presented to describe the reporting patterns of all respondents. The second part of this chapter elaborates on these points of survey data using information collected in the interviews. Then, the chapter concludes with a summary of findings that illuminates general implications from this query and identifies areas of intrigue that will be examined in a later chapter of the dissertation.

5.1 SURVEY RESPONSE PATTERNS

In order to address this research question, the overall counts of how many times each quality was selected were analyzed to determine frequency patterns of the given qualities. Then, the placements of the selected qualities in respondents' top five lists were examined to understand the degree to which administrators believe that each selected quality effectively leads to professional learning.

5.1.1 Summary of Survey Responses

Thirty-nine (85%) respondents out of 45 survey participants selected and ranked qualities of formative feedback. More than 50 percent of the time, the feedback qualities of constructive, goal-oriented, descriptive, positive, and specific were selected in the lists of these respondents. Selection and placement patterns for these five qualities are reported in the next several sections.

Twenty-four (62%) survey participants reported that they believed the quality of constructive to be the most likely to lead to the professional learning of teachers. Constructive feedback is defined in the literature as feedback that names and describes a specific area of improvement for the teacher (Black & Wiliam, 1998; Brookhart, 2008; Brookhart & Moss, 2015; Hattie & Timperley, 2007; Kluger & DeNisi, 1996; Moss & Brookhart, 2015; Sadler, 1998). As evidence of its perceived strength in leading to learning, the whole group of survey participants ranked it in the first position just as frequently as the quality of descriptive. However, three fewer respondents (21 or 54%) selected descriptive feedback into their overall lists. Constructive was also ranked in the third position more frequently than any other quality. In fact, among all of its

rankings, it placed first, second, and third more times than any other given quality of formative feedback.

Just as administrators reported that they believe constructive feedback leads to the professional learning of teachers, they also reported that they regularly use constructive feedback. Three of four stratified groups of respondents (principals, secondary administrators, and elementary administrators) said that they routinely include this quality in their feedback messages to teachers. Assistant principals rated their use of constructive feedback more strongly. They reported dominant use of it in their feedback messages to teachers. The administrators' ranking and reported use of the quality of constructive suggests that principals and assistant principals value its utility and recognize its effectiveness in leading to the learning of teachers.

Twenty-two (58%) administrators rated goal-oriented feedback as the second strongest quality that effectively leads to teacher learning. In fact, goal-oriented appeared in the second position of survey respondents' top five lists more frequently than any of the other 12 qualities. Cogshall et al. (2012) defined goal-oriented feedback as that which focuses on professional growth objectives such as teacher's professional goals or the school's student achievement goals. The precision of focus along with the intent to improve makes goal-oriented feedback an effective contributor to professional learning (Brookhart & Moss, 2015). Every source that was reviewed for this study supports the value of goal-oriented feedback in leading to learning (Black & Wiliam, 1998; Brookhart, 2008; Brookhart & Moss, 2015; Butler & Winne, 1995; Clark, 2012; Garrison, 1997; Hattie & Timperley, 2007; Kluger & DeNisi, 1996; Locke & Latham, 2002; Locke & Latham, 2006; Moss & Brookhart, 2015; Sadler, 1998; Schön, 1983; Shute, 2008). Despite administrators' strong support for the possibility of goal-oriented feedback to lead to teacher learning, principals and assistant principals estimated that they only occasionally include goal-

oriented feedback in their formative messages to teachers. Principals, as a stratified group, reported very low usage of goal-oriented feedback, and, in fact, it was rated as one of the least used of the 12 qualities. Despite this, administrators rank ordered it towards the top of the list. Therefore, as a whole group, they believe that goal-oriented feedback effectively contributes to the professional growth of teachers.

5.1.2 Concluding Discussion

The responses to the two feedback qualities of collegial and comparative are additionally interesting data patterns. Collegial feedback situates both the principal and teacher as learners (Brookhart & Moss, 2015; Clark, 2012; Hattie & Timperley, 2007; Moss & Brookhart, 2015; Sadler, 1989). Administrators in all stratified groups reported their actual use of collegial feedback to be very low. In fact, its use among all administrators was reported as being lower than any other feedback quality. While administrators reported that they rarely, if ever, use collegial feedback in their messages to teachers, they selected it for their lists nearly half of the time (18 selections or 46%). When administrators did select it into their lists, they placed it evenly among all top five ranking positions. It was even ranked four times as the number one most effective formative feedback quality. Administrators said that collegial feedback is not what they typically – if ever – produce for teachers; however, nearly half of them selected it and ranked it as effective in helping teachers to professionally grow. The final question in the interviews asked principals if they learn as a result of producing formative feedback for teachers. Every principal answered that they do learn and provided detailed evidence of their learning process. This was an interesting area of disconnect, between survey and interview responses, that would be interesting to explore in future research.

Comparative is another quality to receive response patterns that are interesting to highlight with regard to the practices and beliefs of administrators. Comparative feedback compares the episode of teaching to highly desired standards of practice. Only three (8%) administrators selected it for their lists. However, survey respondents self-reported occasional to routine use of comparative feedback. Moreover, the literature on formative feedback indicates that comparative feedback effectively leads to learning (Black & Wiliam, 1998; Brookhart & Moss, 2015; Clark, 2012; Hattie & Timperley, 2007; Moss & Brookhart, 2015, Ramaprasad, 1983). Despite the facts that administrators reported a low value of its effectiveness and moderate use of it in their feedback messages to teachers, principals who were interviewed talked very candidly about how they incorporate high quality standards of practice into their feedback processes. Therefore, the formative feedback quality of comparative will be explored in more detail in a later chapter.

5.2 DISCUSSION OF THE QUALITIES THAT ADMINISTRATORS RATED AS MOST EFFECTIVE

Shute's (2008) seminal research article on formative feedback argued that, to be effective, feedback needs to satisfy three conditions: learners should need the information (motive), learners should receive it in time to use it (opportunity), and learners should be able and willing to use it (means). In essence, effective formative feedback should lead to learning. Motive, opportunity, and means are represented by the qualities of constructive and goal-oriented feedback. Constructive and goal-oriented were the qualities that administrators ranked on the survey as having the most impact on teacher learning. The actual utility of both of these qualities was estimated to be minimal to moderate in administrators' self-reported feedback practices on the

survey. Therefore, this section will examine why administrators feel that these qualities are highly effective in teachers' professional growth despite the fact that constructive and goal-oriented feedback don't dominate their feedback messages. The synthesis of interview information will further address the question of what principals identify as the qualities of feedback that most effectively contribute to teachers' professional learning.

5.2.1 Formative Feedback that is Constructive

Twenty-four of the 39 administrators (62%) who responded to Question #6 included constructive in their top five lists and then ranked it predominantly as either the first or the third most effective in leading to teacher learning. Constructive feedback names and describes a specific area of improvement for the teacher. Administrators' belief in the value of this type of feedback is also well supported in the research on professional learning. Grissom et al.'s (2013) research on administrators' instructional leadership emphasizes the importance of using classroom walkthroughs as opportunities for professional development. Brookhart and Moss (2013) use the term "actionable information" to describe the specificity of feedback that, due to its focus on areas of desired improvement, leads to the type of professional growth that Grissom et al. reference. Further, *The Framework for Leadership* document recognizes the importance of leadership practices that set precise expectations for teachers and, therefore, enable administrators to give high quality and useful feedback to teachers (Pennsylvania Department of Education, 2014b).

In the interviews, principals talked about the different circumstances in which they produce feedback that is constructive. Overall, principals talked about developing constructive feedback with the intent of helping teachers map their own course for improvement. This is because the nature of constructive feedback enables teachers to know what to work on, understand that their

effort to improve will make a difference, and compare their work to models of excellent practice. From the perspectives of the principals who were interviewed, constructive feedback leads to learning when teachers state a desire to improve, when it is given in response to teachers' current strengths and needs, and when an administrator requires feedback on a specific improvement area.

5.2.1.1 Constructive Feedback that Builds on Teachers' Own Desire to Improve

When teachers express a desire to improve, principals know that specific, focused feedback is helpful. This was the case for Principal Evan who described a circumstance that led a teacher to want feedback so he could change a less-than-positive experience. In this context, the principal realized the advantage of providing constructive feedback that the teacher would use to improve. Principal Anne mentioned that she privately notes several areas of possibility for feedback but waits for teachers to share their reflections of where they want to improve. Then, she constructs her complete feedback messages using the topics that they identify. She said that she does this because she feels that providing constructive feedback on the areas that the teachers name would be, in the end, more valuable than feedback on the improvement areas that she may have independently noted.

Principals reported that they sometimes find that they must lead teachers to be able to identify their own next levels of growth. Principal Grant did this by asking a teacher to think of his desired outcomes of the lesson by first considering the lesson from the students' perspectives. Once the teacher thought about what the students should be able to know and demonstrate, he was then able to critically reflect on his instructional objective and overall planning. Principal Grant said, "The whole conversation was about the grade reflecting the students' knowledge and understanding of the objective. It was through the conversation that [the teacher] was able to identify that. It [was] not me saying, 'You have to throw that away and do this differently.'"

Several principals talked specifically about the tone and purpose of constructive feedback when they give it in order to support teachers' own improvement goals. They did not feel they needed to formalize or cast an authoritative construct around their formative feedback messages. Instead, Principal Brian said, "I don't feel like it's the right thing to just say, 'Let's go over this because this is what I think.' It has to be 'What do you think? You tell me about this and then we'll discuss what's going on in your classroom.'" Likewise, Principal Carol knows that she can offer constructive feedback, in addition to providing teachers with research and/or practitioner articles, if teachers are seeking to improve in self-identified ways. Principal Carol emphasized, "If they're willing to read it, they'll use it. If it's me forcing it on them and saying, 'I want to hear in a week what you have to say about this,' then it's not going to be as well done."

At the beginning of section 5.2, Shute's (2008) three-legged model for feedback effectiveness started with the first leg that represented the learner being motivated to learn. In the case of teachers-as-learners, the principals in this study recognized the value of noticing and naming an area of improvement that builds on teachers' own desire to improve. Sometimes a teacher wants to change his or her practice as a result of a negative professional experience, and sometimes this desire builds from discussions between principals and teachers that involve critical reflection. In all cases in which principals talked about offering constructive feedback to teachers, they emphasized their first choice to do so in a collaborative, suggestive manner.

5.2.1.2 Constructive Feedback that Builds on Teachers' Strengths

Several principals described another type of opportunity to provide constructive feedback as being when a teacher demonstrates strengths that can be further developed with specific information about next areas of growth. Principals who value the leadership act of building on teachers' strengths demonstrate important "lead learner" behaviors that sustain a growth-minded

culture (Brookhart & Moss, 2013). Inherent in this opportunity is a principal's deep knowledge of each teacher's abilities. Principal Carol explained how she provides feedback that pushes a successful teacher to stronger levels of work by saying, "Sometimes I'll see something dealing with stations or groups, and I say, 'Oh, I really like the way that you did this. Let's think about how you can take it to the next level.'" Then, Principal Carol names the next level in her constructive feedback message.

While Principal Carol provided an instance of constructive feedback by using the example of pushing a specific practice to "the next level," Principal Anne described her use of constructive feedback as focusing on more transferrable skills. In her practice, she seeks to help her teachers strengthen their skills as a whole, beyond the scope of the brief classroom visit or the scheduled formal observation. She said, "I give them formative feedback based on some of what I know are their strengths. That helps to improve [their work overall]." She elaborated on her feedback intentions by describing a teacher with whom she had recently worked. While the teacher demonstrated needs in several aspects of her teaching, Principal Anne decided instead to focus on naming and describing a specific, transferrable area of needed growth. In doing so, she said that she thought first about different ways that the teacher is already growing in order to form feedback that built on these areas.

Shute (2008) recommended that learners should be able and willing to use feedback in order for the feedback message to be ultimately effective in leading to learning. This element of her model relates to the experience of principals who use constructive feedback to build on teachers' strengths. By offering specific ways to improve and apply their current practices, principals can capitalize on teachers' willingness and availability to learn. While these last two conditions may

seem optimal for constructive feedback to be effective, the principals in the interviews directly addressed the usefulness of constructive feedback when teachers have a recognized need.

5.2.1.3 Constructive Feedback that Builds on Teachers' Current Needs

A third use of constructive feedback by the principals who were interviewed is to name and describe a specific area for improvement based on teachers' current needs. Principals discussed this use in contexts that did not involve failing or ineffective teachers. Instead, these were situations in which teachers needed to be led more directly to improvement rather than being presented with an opportunity for continued growth. For example, Principal Carol explained that she provides constructive feedback in a directive manner for teachers who are not already independently challenging themselves to improve and update their practices. To do this, she said that she plans her feedback by thinking of what she wants the teacher to get out of it, in essence its "end goal." She explained that she directed a teacher to adapt lessons to meet her students' needs by constantly observing the students and their work throughout the lesson. Principal Carol said in the interview that focusing on this big picture goal helped the teacher to apply her learning to other aspects of her professional practice. The care in how Principal Carol planned the long-term purpose of her feedback to the teacher was similarly shared by other principals. Principal Felicia also maintained a broad view of improvement in the feedback example that she described. She chose the nature of her constructive feedback by saying, "I centered my focus on questioning strategies and how the teacher formatively assessed his students so he knows what they know before he goes on with the lesson the next day. Those were two specific areas I was looking at."

Other principals explained how they use constructive feedback to improve a teacher's more immediate practice and don't necessarily focus on more wide sweeping learning objectives. Principal Dana delivered a very explicit feedback message to a teacher when she said, "The next

time I come in, I want to see you using this rubric in this manner.” She defended the directness of her message by explaining the teacher’s need to be given very precise guidelines for a practice that she didn’t already know how to do. Principal Dana knew that she needed to give the teacher nearly step-by-step directions so the teacher could put the newly learned practice into her teaching repertoire. Another case of constructive feedback being an effective way to strengthen a specific need is when Principal Grant observed an assessment that didn’t measure the students’ learning and didn’t align with the lesson’s objective. He said, “That was really out of line. I thought that was an important fix. It was the most critical element.”

Overall, when principals offered examples of providing specific feedback that named an area to improve, their authoritative word choice and tone changed depending on the needed area(s) of professional growth. This is especially obvious when considering the use of constructive feedback to help a teacher achieve an area of required improvement. Communicating such highly specific feedback as rubric use or assessment style, as seen in the examples above, helps principals build the necessary skills that Brookhart and Moss (2013) recommend. This practice also evidences a respectful relationship of learning and support between the principal and the teacher. If the teacher does not already have the skills to enact the feedback, the principal knows that help and support is needed. In these cases, the principals interviewed felt a responsibility to provide the help, demonstrate and describe the practice, and then follow-up with support.

5.2.1.4 Constructive Feedback for an Required Area of Needed Improvement

When the context of constructive feedback changes to one in which a teacher must improve for the sake of students’ learning or program requirements, the language that principals used in the interviews to describe their formative practices became more intense than how they talked about supporting teachers’ self-identified or next area of growth. As an initial example, Principal Felicia

talked about a teacher who needed to increase the rigor and relevance of his high school course. The principal stated that, in the case of this teacher, “If you don’t give feedback to [these kinds of teachers], they don’t know what they’re doing that is right or wrong.” Another principal said, “I think you always want to look at the areas that you know people tend to struggle with,” in order to explain the importance of poignant, clear constructive feedback when teacher improvement is necessary.

Principals explained that, while they normally are patient with progress and learning no matter how moderate it may be, they tend to set clear limits and deadlines in the case of necessary improvement. Principal Brian established a timeframe of one year for a teacher to improve and provided step-by-step input and feedback so he could make gains. He paraphrased what he said to the teacher in this way: “I’m going to come in. I’m going to observe. I’m going to give you feedback, and then we’re going to research best practice based on what you are doing next. Then, I’m going to be back here in a month, and we’re going to look at your learning again to see how it has impacted your class.” Principal Dana stated that she assigned an area of improvement to a teacher based on their difference of opinion of the teacher’s proficiency with a particular teaching skill. Principal Dana compared the teacher’s work with language from *The Framework for Teaching*, assigned her a professional resource to read, provided her with specific instructions for the area of her practice that needed to be improved, and then said, “Whenever we do our follow-up walkthrough in the course of three to five weeks, I’ll be looking for something with this specific Domain and Component [of *The Framework for Teaching*].”

In summary, principals who highly value many of the same effective formative feedback qualities as those named in the literature seek to individualize their feedback to the needs of each, unique teacher. However, it is also the case that principals have their own “default” areas of

specific feedback that they gravitate to when thinking of teachers' professional growth. In some cases, their go-to topics are ones that the principal has already mastered. Principal Anne was a teacher-leader before becoming an administrator. In this role, she led professional development sessions with groups of her colleagues and served as a resident expert on the topic. Therefore, she stated, "I probably do have some pets that I always look for. I would say that my background in the last professional development initiative is pretty strong. So I probably do often reference that with my teachers." Another principal used formative assessment language in her response to a question about feedback topics when she said, "A suggestion that I give often is about using Look Fors in a way that forces students to self-reflect on their progress towards high quality work." She later shared that her district had been focused on formative assessment training in previous years, so she conducted walkthroughs with an expectation that she'd still see strong evidence of formative assessment practices. When she doesn't, she provides that feedback first and foremost so the teachers' maintenance of professional practices is reinforced.

The interviews also emphasized how the principals in this group were so committed to encouraging a growth-oriented mindset among their staff members that they regularly modeled, provided feedback for, and then demanded improved professional practices. In some cases, principals' constructive feedback was developed from a recent area of focus. A principal mentioned that she provided specific feedback on teachers' practices that relate to current topics, like strategies discussed at a grade-level meeting or instructional philosophies that support a new textbook adoption. When this feedback was given right before or soon after a staff meeting or professional development session, she felt that its impact was stronger on the day-to-day instructional choices of teachers in her building.

Shute's (2008) three conditions of effective formative feedback are motive, opportunity, and means. Constructive feedback that is provided for teachers who seek to learn and grow in a particular area satisfies the "motive" component. Constructive feedback might be delivered in a way that teachers can use their existing strengths and skills to implement, or it can be given but then supported because teachers do not have the pre-requisite skills to engage it. These two conditions fulfill the "means" category which is when a recipient of feedback is able (or, in some cases, is made able) to receive it. These last two sections of the discussion of constructive feedback deal with situations when a teacher needs to improve. This circumstance fits into Shute's (2008) "opportunity" category in that the feedback is timed to coincide with needed change and focused follow-up is provided by the principal. Such an interaction can be rather directive on the part of the administrator; however, the literature shows that specificity of feedback that matches a clear improvement goal is another condition that needs to be met in order for feedback to successfully lead to learning (Brookhart & Moss, 2015).

5.2.2 Formative Feedback that is Goal-Oriented

Effective feedback relates to a specific and desired area of growth for the teacher, and often this is possible through the establishment of formal or informal professional goals (Shute, 2008; Brookhart & Moss, 2015). Hattie's (2015) description of the most effective instructional practices acknowledge the value of setting explicit goals and working as a learning team to meet them. This notion is supported by The National Comprehensive Center for Teacher Quality, in its research and policy brief (2012). The brief explicitly states what Hattie infers which is that the goals and the work to achieve them are accomplished in the actual setting of the job. This means that teachers and principals are working on their work while they are doing the work. The term for this is "job-

embedded professional learning.” The National Comprehensive Center for Teacher Quality (2012) defines “job-embedded” as being when professional learning is aligned with student standards, school curricula, and school improvement goals and when it occurs within the context of the regular working environment. Such professional development opportunities are offered by principals in the formative feedback they provide after classroom visits. The next two sections illustrate the perspectives of principal interviewees on the power of matching feedback to teachers’ specific goals.

Twenty-two (58%) of 39 administrators selected goal-oriented in their top five lists and then ranked it predominantly as the second most effective formative feedback quality. Principals’ responses in interviews elaborated on the quality by acknowledging that goals can be set by administrators so they align with the school’s or district’s achievement objectives or they can be chosen by teachers based on a self-assessed need to improve their own practice. In either case, this section addresses the power of goal-oriented feedback, as believed by administrators, to lead effectively to the professional learning of teachers.

5.2.2.1 Goals that Administrators Set

Brookhart and Moss (2015) define the term “goals” in the teaching and learning context as that which improves student work and can be reached through the acquisition professional learning targets. They explained that these professional learning targets provide a learning trajectory for teachers and principals as they work together on strengthening the teachers’ skills. Student achievement and growth are the typical outcomes of most public school goals. Principal Grant explained that his district sets the expectations of what general aspects of teachers’ work should strengthen. He used the example of asking rigorous questions as a district-wide goal area. When he performs walkthroughs, he looks for evidence of such questioning and aligns his feedback with

them. Several other principals mentioned that their building goals drive the feedback that they give to teachers. *The Framework for Teaching* is another construct for goal-setting (Danielson, 2011). This document informs Principal Anne's feedback who uses the four Domains to name goal areas for needed growth. She consults the descriptions of high quality teacher work and then compares them with what she sees teachers doing during her classroom visits. Where she sees a disconnect, and determines therein lies an opportunity for teachers' professional growth, she provides feedback.

In other cases, the principals, themselves, determine the focus of their feedback on the widespread need they see among members of the teaching staff. This determination does not necessarily reference a state, district, or school goal but, instead, is based on walkthrough data that is collected by administrators. For example, Principal Felicia said that feedback focus areas are decided by the walkthrough team in advance of their classroom visits. They look for evidence of the pre-determined aspects of teaching and then provide feedback on them. Principal Grant said that he frequently looks for student engagement when he conducts walkthroughs. In particular, Principal Grant gave an example of how he determines evidence of this. He said that when students have ownership of their work by determining, for instance, how it is going to be assessed then he notes it as student engagement and thinks of helpful tips to strengthen the practice. Other principals in the interviews named their typical or "pet" areas of classroom instruction elements as their focus, including closure, transitions, and differentiation.

5.2.2.2 Goals that Teachers Set

The principals who were interviewed described teacher-led goal-setting as another way that professional goals are determined. When teachers set their own goals, principals who want to help them reach their goals provide feedback that is focused on this growth process. Brookhart

and Moss agreed and recommended that “the feedback should feed teacher learning forward, identifying next steps – next targets – in a journey toward the goal the teacher has selected” (2015, p. 26). Even within this context of teacher-led goal-setting, administrators fulfill two types of roles. The most involved is when an administrator directs the process of goal-setting but maybe not the actual goals themselves.

Principal Dana said, “I ask my staff members what they plan to explore over the summer to make them a better teacher next year. And then, at the beginning of the year, we have them set goals for themselves.” She explained that this is a rather standardized process that occurs annually. Once the goals are submitted, Principal Anne holds herself responsible to look for professional development opportunities that support each goal. She knows that job-embedded learning is believed to more reliably lead to improvements in teaching and learning. Therefore, she looks for Intermediate Unit (see Footnote 1) workshops, professional development sessions offered by various teacher centers, and conferences hosted by the Pennsylvania Department of Education. She said, “I think we should have enough at our fingertips that touches upon each one of the people.” Principal Felicia explained how she uses her knowledge of teachers’ goals to guide her feedback messages. Before entering a classroom, she recalls the goals and then thinks, “Okay, this is something that they want to work on. Is this something that I’m seeing them work on?” Once Principal Felicia is comfortable with this goal being a valid area of need, she then focuses her attention on it when constructing feedback.

A lesser-involved role for principals to play in the goal-setting process is to offer guidance, such as by removing barriers, for a teacher who wants to improve in certain areas. Principal Brian talked about providing coverage for a teacher so the teacher could observe his colleagues. The teacher then used his observations to identify practices that he could develop in his own teaching

that would lead to his professional growth. When this was possible to do for one teacher, Principal Brian said, “He would bring a lot of that information back to our meetings and say, ‘Yes, I can do this. I see what Mrs. So-and-So is doing. I should be applying that in my classroom.’”

At this point in the feedback process, the administrator is providing guidance that supports the teacher’s goals that were set when he most wanted to achieve them. Schön (1983), whose application of “reflection-in-action” to the learning of professionals, uncovered this powerful practice of learning by doing and then critically reflecting. He emphasized the importance for professionals, in all fields, to develop reflective habits to the point of automaticity. Korthagen’s (2001; 2010) work focused on the professional learning of teachers and, likewise, stressed the value of being aware of times when familiar, possibly unconscious, solutions are unable to resolve new situations. This is the critical point, Korthagen (2010) says, that a teacher is ready for professional learning because she has established an internal goal for improvement.

Principal Evan described this moment with great emotion when he said, “The teachers are actually rougher on themselves than I am. They’re self-reflecting without me having to pose a whole lot. They are looking to improve.” Principal Evan noted that he not only feels proud of the teachers for their desire to grow professionally, but he also feels like his feedback will likely contribute productively to their professional growth. Price’s (2011) research revealed how the affective relationship between principals and teachers form their attitudes towards learning. She stated, “With this trust, cooperation and collaboration around unified school goals and program coherence can thrust forward school improvement ideas and plans” (p. 42). Her point was that trust between teachers and principals reinforces the attainment of goals. This trusting relationship is realized when supportive school leaders explicitly communicate their expectations of teachers’

work and/or clearly set building goals and then have the skill and autonomy to successfully lead the teachers to reach these expectations.

5.3 CONCLUSION

The previous chapter addressed the first research question about the qualities that administrators use in their formative feedback messages to teachers. The data analysis concluded that administrators reported dominant use of positive, work-focused, and descriptive feedback qualities in their formative messages to teachers. While these qualities were not as strongly supported in the literature as others, the interviews with principals revealed how administrators justified their use. Grissom et al. (2013) defined “feedback” as a message that must actually lead to learning. Therefore, the second research question explored the qualities that administrators named as those that most effectively lead to learning. The majority of administrative groups rated goal-oriented feedback and constructive feedback as being highly effective. In the survey, constructive feedback was ranked in the top five the most number of times. Goal-oriented feedback was ranked in the top five the second most number of times. However, survey respondents self-reported very moderate to minimal usage of these two qualities. Despite the fact that constructive feedback and goal-oriented feedback are highly effective in leading to the learning of teachers, administrators admit that their feedback messages are not dominated by them.

Research on the topics of formative feedback and adult learning strongly supports these two qualities as leading to professional learning. Hattie (2012) explained the value of setting transparent criteria that enables the learning team to follow a path towards achieving a goal. Success criteria include knowledge of the learners’ current status relative to the goal and a shared

understanding of when the learner has achieved the goal (Brookhart & Moss, 2015). The combination of naming goals and then providing specific information along the way of reaching them engages this research.

The next chapter further explores the differences between administrators' feedback practices and beliefs by addressing the ways that principals provide formative feedback on the effectiveness of teachers and opportunities for growth for teachers. The data was collected in interviews with seven principals who talked about their processes for deciding on specific feedback points, the construction of messages that they feel are effective, and the communication of those messages in a way that leads to teachers' professional learning. This deeper understanding of the feedback process is realized through the input of principals, and implications on practice, policy, and future research are drawn so that teacher learning can and will occur.

6.0 ADMINISTRATORS PROVIDE COMPARATIVE AND SPECIFIC FEEDBACK THAT FEEDS TEACHERS FORWARD

This chapter addresses the third research question about the ways that principals provide formative feedback so that teachers learn and professionally grow. Interviews with seven principals provided the data from which themes were synthesized and are presented here. A review of the literature named 12 formative feedback qualities as being able to effectively contribute to teachers' learning. These 12 qualities serve as a framework for this and previous chapters' discussions of the formative feedback qualities that administrators use and value. Principals who were interviewed described their methods of providing formative feedback as including comparative and specific feedback that is meant to feed teachers' learning forward.

The next three sections will address the third research question which is "What are the ways that principals provide ongoing formative feedback on the effectiveness of teachers and opportunities for growth for teachers?" The themes that are discussed engage three qualities of formative feedback: that which feeds forward, feedback that is specific, and feedback that is comparative. Comparative feedback compares the episode of teaching to best or highly desired standards of practice. While standards of practices are named and described in *The Framework for Teaching* (Danielson, 2011), principals named educational literature and the strong teaching practices of colleagues as sources they use to provide comparative feedback. Specific feedback is limited to one or two areas of focus. Interviewees shared that they use specific feedback to guide

individual teachers as they develop competence and independence. Feeds forward refers to feedback that identifies the next level of work for the teacher. Interview data will underscore the importance of administrators knowing the strengths and needs of each individual teacher and maintaining a trusting relationship with them.

Principals' active involvement in teacher learning comes directly from *The Framework for Leadership* (Pennsylvania Department of Education, 2014b). The section entitled, "Leadership for Learning," states the expectation that principals and assistant principals implement high quality instruction by monitoring their teachers' performance after professional development in order to ensure the application of the lessons to their teaching. Furthermore, a companion document for use by supervisors of principals and assistant principals poses guiding questions to promote strategic discussions (Pennsylvania Department of Education, 2013b). In it, the expectation of monitoring teachers' performance is an area of focus. A discussion prompt is provided for supervisors to pose to the building-level leaders that asks them to describe what they do to give teachers ongoing feedback. The prompt asks "In what ways do you monitor teacher performance and give teachers ongoing feedback on their effectiveness and opportunities for growth?" This study seeks to understand this, too, so the third research question deviates from the kinds of qualities administrators incorporate in their messages (Research Question #1) and from what administrators value in terms of qualities that lead to teacher learning (Research Question #2). The third question explores the multi-dimensional practices of administrators who know their obligation to help teachers learn and grow.

6.1 FORMATIVE FEEDBACK THAT COMPARES

Comparative feedback relates a teacher's practice to highly desired standards in order to identify areas of needed growth. The literature on feedback emphasizes this critical and intentional process as an important step to assess the work being observed. From Ramaprasad's description of valuable feedback in 1983 to Brookhart and Moss's article on formative practices in 2013, comparing actual with desired work remains an effective and recommended practice. The principals interviewed named three sources that provide examples of highly desired standards of practice: literature in the education field, professional development topics, and collegial observations.

In every one of the interviews, principals talked about their use of comparative feedback in cases when teachers were struggling to improve in a specific area. The principals recognized the tension that formed or had the potential to form between the teachers and themselves. Believing that this tension would make professional learning challenging or even impossible, the principals turned to a third party resource to provide the de-personalized perspective they felt was needed to convince the teacher of the necessary change. The principals no longer referenced their own opinion, their own knowledge, or their own experience. Instead, the principal gave a model resource to the teacher for the purpose of objective comparison, analysis, and reflection on next steps.

Principal Brian explained that he regularly consults professional literature to provide guidance for the teacher and for him. He called the process of reading and comparing as doing "research" in which they learn together. Principal Carol provides professional resources for her teachers. She explained, "I do try to provide different readings, websites, and resources throughout the school year for them to go on. I've even written the suggestion, 'This lesson reminded me of

the resource that I sent out. You need to review it. It has some really great ideas that may help make this lesson stronger.’’

Using topics from a shared professional development experience as material to compare with a teacher’s current practice is another strategy that principals discussed. Principal Anne and Principal Dana both explained how they reference these sessions in their feedback messages to teachers. Providing feedback that compares teachers’ work with professional reading and/or training sessions upholds an important component for principals in *The Framework for Leadership* (Pennsylvania Department of Education, 2014b). Component 3c specifically describes distinguished principal behavior as being evidenced when teachers integrate their learning into their daily practice after professional development experiences.

Another comparative technique that principals use is to ask teachers to observe their peers in order to develop next steps for their own professional growth. Principal Dana says that she identifies key people in her school who are experts on certain instructional topics. She will make a recommendation for a teacher to watch the expert and integrate the practices when she knows the teacher would benefit from seeing a strong demonstration of a certain practice,. Principal Anne reported that she tries to provide comparative feedback as often as possible since she knows that it is an effective practice. She does this by describing the level of work that she wants to see the teacher accomplish and naming a staff member who is willing to demonstrate it. She then guides the teacher through the process of reflecting and comparing on the strong practice that is observed.

Khachatryan (2015) studied feedback that is given to teachers in order to determine the elements of feedback messages that were the most useful. He concluded that effective feedback focuses on the teacher’s learning by describing his or her performance, relating it to a desired standard, and using the standard to identify next areas of attention and correction. In essence, he

states, “feedback should enhance learning and performance” (Khachatryan, 2015, p. 170-171). Danielson (2011) and her group created *The Framework for Teaching* in order to achieve specificity and agreement on universal standards for teaching performance. This framework names and describes four levels of teachers’ practice from “Failing” to “Distinguished.” It is used to evaluate teachers in Pennsylvania’s Educator Effectiveness system which is predicated on the vision that “Educators must take the time to gauge where they are against where they would like to be to offer the best opportunities for student achievement” (Pennsylvania Department of Education, 2013a). With this same goal in mind, Danielson (2010) published an article to explain how the evaluation process should be used to help teachers learn. The article emphasized the importance of answering the key question, “How good is good enough?” (Danielson, 2010, p. 35). Danielson explained that effective teacher evaluation systems must lead to teacher learning and can only do so by being transparent and credible. By knowing what good practice looks like, principals and teachers can work together to achieve the standard. In Pennsylvania, administrators have been using *The Framework for Teaching* for up to three years. This brief time frame might not yet be enough for principals to have embedded the framework into their feedback practices. However, the notion of using comparative feedback is clearly a fundamental aspect of principals’ feedback practices. Principals currently turn to professional literature, professional development sessions, and the high quality expertise of teaching colleagues to provide comparative models.

6.2 FORMATIVE FEEDBACK THAT IS SPECIFIC

Principals described how they specify one or two areas of focus for professional growth when they develop and communicate effective formative feedback. In order to support teacher learning,

principals know that they need to give input that is immediately relevant to the teaching episode and, ideally, can also be applied to broader teaching circumstances. Principal Anne addressed this when she said, “I really don’t want to just say, ‘That was awesome on April fourth.’ I want [the teacher] to be awesome on April fifth, sixth, seventh, eighth, ninth, and so on.” Principal Grant assessed a recent feedback message that he gave a teacher by saying, “I think the feedback [I gave] gives him a reason to think backwards and ask, ‘What is it that I want students to know?’” He explained that planning a lesson backwards after first knowing its goal is a habit that will enrich many aspects of the teacher’s instruction and evaluation practices. Principal Brian encourages applicability of effective practices by leading explicit discussions around what can and should be incorporated. He said, “It’s kind of like a research project where we will [read something] and the teacher will come back to our next meeting in order to answer my question, ‘How can you apply this?’” Principal Brian’s use of direct questioning enables him to know what teachers are thinking and doing. It also helps him to assess where they need to grow next.

Similar to Danielson’s work (2010) that promoted teachers being able to learn within the evaluation system, The National Comprehensive Center for Teacher Quality investigated the connection between teacher evaluation and job-embedded professional learning (Coggshall et al., 2012). For this process to work, the authors recommended that feedback should come from evidence-based professional conversations positioning the teacher as the learner who reflects and self-assesses his or her practice. The point of this process is for teachers to identify specific areas for improvement. Principals in this study explained that this outcome can be achieved during their feedback dialogue with teachers. The dialogue routinely needs to include questions that focus on the specific evidence collected, that lead to a comparison of evidence to high quality standards of

practice, and that culminates in naming next areas of work in order to continue the improvement cycle.

The principals who talked about questioning did so with the mindset that teachers learn when they engage in critical discussions about their practice. For example, Principal Grant said, “We are a growth-minded District. We emphasize retesting, relearning, and students getting it.” His method of producing and delivering specific formative feedback to teachers honored this growth-minded educational culture for students. He spoke about giving teachers the chance to try again and providing the support to help them “get it.” Principal Felicia also made the connection that what is good for students, likewise, is good for teachers. She made the link between effective questioning for students and effective questioning for teachers. As adult learners, just as younger learners, teachers benefit from questions that engage critical reflection and discussion. Principal Felicia additionally noted that the level of questions contributes to the quality of the discussion and the information about learning that is gained. Principal Carol stressed that such critical, rigorous conversations enable individual teachers to learn exactly what they need at the time that they need it.

The principals expressed how they tend to have the same goals for teachers as teachers have for students. This is in addition to teaching teachers using techniques that are also effective for students. Just as a teacher wants his or her students to develop skills of independent thinking and self-directed learning, principals seek the same outcome of their feedback. Principal Grant reflected on a recent feedback message that he gave a teacher and hoped, “Now I think that, for whatever rubric he creates from here on out, [my message] will trigger. I don’t have to look at every rubric. That’s where I thought that [my message] could have a lasting impact.” Principal Grant likened this development of professional capacity to when a student becomes the seeker and

finder of information and doesn't need to rely on the teacher in order to learn. He explained that when teachers are able to self-assess and drive their own professional learning, they reach a level of independence that makes a meaningful impact on their overall effectiveness.

Hattie (2009) published an article on high impact leadership strategies that improve teachers' instructional practices. His focus on above-average impacts on student learning included the presence of teachers who are "visible learners." Hattie explained that "visible learners are invested in learning, can evaluate their own learning, know what to do when they get stuck, and collaborate with others to pursue their own learning." He adds that "All these attributes are teachable" (Hattie, 2009, p. 39).

This belief directly involves formative feedback by principals to teachers for the purpose of professional learning. Principals know that providing comparative and specific feedback will lead to teacher learning. Additionally, when asked to describe their process for contributing to the professional growth of teachers, nearly every principal who was interviewed named feedback that "feeds forward" or identifies the next step of improvement for the teacher as being a critical element of their feedback decisions. Not only did principals feel that teachers could and would grow if given the right kind of feedback, these principals felt that their own efforts would effectively contribute to the teachers' growth.

6.3 FORMATIVE FEEDBACK THAT FEEDS FORWARD

Six of the seven principals who were interviewed talked about their experiences in providing feedback that they intentionally developed to help a teacher improve. They referenced the importance of maintaining an organizational ethic of constant professional growth. Several

principals also identified the value of knowing individual teacher's strengths and needs. Guiding both topics is the importance of sustaining trusting relationships with teachers in order to encourage risk-taking and improvement-seeking attitudes. The paragraphs ahead will explain these three aspects of formative feedback that feeds forward.

6.3.1 Feedback that Contributes to the Ethic of Constant Professional Growth

Principals who strive to produce feedback that feeds forward maintain a lead learner's mindset. They expect to learn and grow; they expect teachers to learn and grow. And from this effort, they expect students to learn and grow. Brookhart and Moss (2013) published an article on a formative assessment project they worked on with principals. They concluded that "the principals who saw themselves as learners were best able to lead a shift toward a culture of learning in the school" (Brookhart & Moss, 2013, p. 14). Maintaining a culture of learning is not an intense process, as far as the principals in this study are concerned. In fact, two principals, in the interviews, specifically mentioned "tweaking" a skill to make it better. Principal Evan reminds his teachers that "we'll keep improving as we move forward with things." Principal Felicia said, "We have a saying here, 'You don't live in Distinguished.'" Her use of the term "distinguished" comes from the Pennsylvania Department of Education's educator evaluation tool. She explained further, "You may visit in certain areas, but you don't live in that distinguished area. We can all improve."

The common message among principals is that growth does not need to occur by great leaps and bounds. Principals expect the learning process to have an uneven cadence and to occur rather organically through a tightening or sharpening of integrated skills and content over time. Several interviewees talked about providing feedback that they hope will help the next teaching episode and then building from there so that the new learning can be immediately practiced and

reinforced. Principal Brian explained a year-long process with a teacher where each successive observation resulted in a few additional needed areas of attention. His intention was to provide manageable, achievable feedback messages that would move the teacher's practice forward between each classroom visit. Principal Anne described how her feedback contributes to a new teacher's overall capacity and not just on a specific weak skill. She said, "I try to look for the things that we talk about when she implements [my feedback]. I follow those topics from walkthroughs to observations." In both cases, these principals sought to meet the teachers where they are and move them forward in their professional practice. The principals needed to know each teacher's professional growth goals in order to do this. Feeding teachers with formative feedback designed to help them improve additionally requires that administrators thoroughly know the skill set of individual teachers.

6.3.2 Feedback that Aligns to the Needs of Each Teacher

Principals know that providing feedback that feeds forward is most effective when it is exactly what the teacher needs. Principal Carol's attention to and expectations of teachers' individual differences reveals a common belief among the principals in this study. She produces formative feedback that takes into account the strengths and needs of each individual teacher. She explains, "It depends on the teacher. I have teachers at different levels [of experience and expertise.] As I walk into the classroom, I'm saying to myself, 'This is my expectation, after everything we've gone through, I'm expecting to see this from this teacher.'" Principal Anne said that her knowledge of individual teachers comes from knowing their areas of intended growth through their goal setting.

Principal Carol adds that a teacher's level of comfort for improving in a specific area is also important to consider when developing feed forward feedback. She knows that some areas of necessary growth might be more challenging than others, so she is sure to provide positive reinforcement to support teachers' efforts. Principal Evan, likewise, considers teachers' readiness to take on a new learning challenge. He asks himself, "When I throw ideas out, are they willing to jump on them? Are they still hesitant? Are they finding reasons why they're not working? Do they need a little bit more time because that last hurdle that we overcame took a lot out of them? It's a lot of feeling them out and reading their body language." An intentionality of providing feedback that will, indeed, lead to learning evident in Principal Evan's comments. The foundation of this intention lies in two convictions: Good feedback will produce learning, and Learning is what needs to happen for everyone in the school environment.

6.3.3 Feedback that Sustains Trust

Price (2011), in her work on affective relationships, found that principals' relationships with teachers affect principals' and teachers' feelings of commitment. Positive relationships result in trusting school spaces, optimistic attitudes, and a productive school climate. Wahlstrom and Louis (2008) argue that the existence of "trust" in a school environment is not, by itself, a determining factor in school improvement and student achievement. They say, "Trust in the principal's instructional support seems to reflect a passive rather than an active form of leadership" (Wahlstrom & Louis, 2008, p. 482). Wahlstrom and Louis's research aligns with Price's in making the point that a balance of power between principals and teachers, clear performance and achievement expectations, and strong professional bonds among teachers (that principals help establish) is more important to school improvement than trusting relationships.

The principals in this study characterized the development of trust as a result of their support of teachers' efforts to grow and learn. In particular, Principal Evan talked at length about how he strives that his teachers know that he will support their efforts to improve. In doing so, he differentiated what might look like initial problems as being simply obstacles. He said, "Teachers need to be able to share [their concerns] with me." While agreement is important in a trusting supervisor-supervisee relationship, times of dissent are also telling of a healthy, trusting professional culture. Principal Evan extended his discussion to include times when teachers don't accept his feedback. He evidences a trusting relationship when a teacher can say to him, "Hey, Evan. I hear what you're saying. I agree with you 100 percent. But right now, I'm really focused on this [other aspect of my teaching]." Because he values and nourishes trust, he said, "Ninety-nine percent of my conversations are, 'When are we ready as a teacher or as a building to take the next step?'"

While the principals in this study wanted teachers to feel supported, they prioritized the obligation to help teachers learn and grow. However, not one principal talked about feeling obligated to help teachers learn and grow because of the expectations set forth by the Educator Effectiveness system. The principals, instead, spoke about how a commitment to learning within a trusting professional culture enables all members of the instructional community to sustain an intrinsic feeling of worth.

Several principals in the interviews shared the professional and personal satisfaction that they feel when teachers who they supervise are engaged in learning and growing. One principal described a professional development initiative as "a year of fulfillment" when he saw staff members internalizing their learning and applying it to their everyday practices. Another principal said that she enjoys teachers' life-long learning behaviors. As an example, she described times

when teachers ask her to watch them perform a teaching skill or strategy that they just learned. When this happens, she is sure to validate their efforts and is proud to be a part of their development.

Principal Carol uses the learning of teachers as a springboard for her own continued formative feedback. She describes a cycle of learning that begets learning. While teachers are strengthening their own practices, they can be encouraged to share what they have learned with each other so that everyone grows as a result. Principal Grant and Principal Evan both referenced the vibrant professional learning cultures in their schools. These cultures are marked by teachers who are willing to take risks, principals who are willing to support them, and the whole school community that learns and benefits as a result.

6.4 CONCLUSION

Interestingly, on the survey, administrators rated their use of comparative, specific, and feed forward qualities in their feedback messages to teachers as minimal. They ranked the value of these same three qualities in leading to professional learning as low, too. Despite their reported use and belief data, principals described their process of providing formative feedback to teachers as containing these qualities. Principals spoke to the benefit of knowing each teacher's individual strengths and needs, suggesting only one or two improvement goals that are unique to each teacher, and comparing the teacher's work with high quality standards of performance in order to identify areas for needed growth. To do this, the principals maintain a belief that all members of the school community learn and contribute to each other's learning.

The first question of the interview asked participants to think of a recent situation in which they provided formative feedback to a teacher for the purpose of professional learning. While formative feedback can certainly be used to further strengthen an already polished area of a teacher's practice, all principals in this study chose to describe a teacher improvement scenario in their example. A few of them chose feedback situations regarding teachers who needed to improve in order to avoid formal written recommendations. Brookhart and Moss referred to this level of principal commitment as the future, "a future in which principals' main responsibility has to do with learning. When principals lead [the] learning in their buildings, the school culture transforms" (2013, p. 17). The principals' willingness to talk directly about the need for substantial intervention with some teachers in the interviews gives hope that the "mum effect" may be a minimal part of practice for some school leaders.

Yariv (2006) explored principals' reluctance to give negative feedback to teachers in an article entitled, "Mum Effect." He described the process that principals must engage in order to give such negative feedback as being complicated and stressful. While it is well known that providing formative feedback is an effective method to strengthen an individual's performance (Ramaprasad, 1983; Shute 2008), the principals in Yariv's research demonstrated great reluctance in dealing with problematic teachers (2006). This reluctance is evidenced by first ignoring the situation, then conducting gentle, nuanced discussion on the topics of concern, then moving to more critical verbal discussion, and finally to producing formal, written correspondence (Yariv, 2006). Only one principal in this study described a previous unsettling emotion regarding providing comparative feedback. Principal Anne admitted, "I was probably a little scared of doing it before. Or I wasn't comfortable saying, 'Oh, other people are doing this awesome thing.' But I think I'm more comfortable now for whatever reason." It could be that the "reason" is due to her

increased administrative experience or the length of time that she has held the same administrative position in the same school; however, her sentiment is honest and one to consider in the context of formative feedback and teacher growth.

Yariv (2006) concludes that ignoring improper behavior of teachers is what principals frequently choose to do. However, the principals in this study openly referenced the challenging feedback situations as ones that they are proud of as ones that exemplify their work with teachers. Knowing that the interview group was selected because of their survey response patterns most closely matched the research on effective feedback, these principals are already recognized as a high implementation group. Therefore, implications are drawn from their practice in order to make recommendations to the practices of principals, to the current policy guiding educator effectiveness and professional growth, and to future research on the topic of giving formative feedback, especially collegial feedback, for the purpose of professional learning.

7.0 RESPONSES TO RESEARCH QUESTIONS AND FINDINGS

This study identifies the elements of feedback that administrators regularly use in their messages to teachers. It distills the qualities of feedback that administrators value as being able to effectively lead to teacher learning. Additionally, this study describes the feedback practices of principals who responded that they believe in the effectiveness of certain qualities that were also well supported by the literature. Responses to each of the three research questions are presented next. Then, findings from these responses are discussed.

7.1 ADMINISTRATORS USE POSITIVE, WORK-FOCUSED, AND DESCRIPTIVE QUALITIES IN THEIR FEEDBACK MESSAGES TO TEACHERS

Principals and assistant principals provided survey and interview responses about their formative feedback practices. The data indicated that administrators predominantly use positive, student work-focused, and descriptive feedback. A common link among these three qualities is that they encourage the teacher-recipients to accept and focus on their strengths along with next areas of needed growth.

Administrators provide positive feedback messages that identify and describe strengths. They said that naming and explaining the value of positive practices helps teachers know what exemplary work looks like and enables them to compare their future work with these strong

practices. Administrators also said that positive feedback helps teachers accept recommendations for next areas of growth. They shared their experiences that teachers are more open to suggestions after their good work is first affirmed and additionally feel that sharing positive feedback builds confidence in teachers. Administrators believe that teachers' increased confidence enables them to take risks that invariably lead to more learning.

Formative feedback that is work-focused centers on what the students are doing, saying, writing, and/or making during the lesson. This feedback quality prioritizes the students and their needs as paramount in determining teachers' necessary skills. Administrators know that watching the students helps identify what is working well and what needs improved in the lesson. Descriptions of what the students do, say, write, and make enable teachers to reflect on their effectiveness in order to make decisions about their own needed growth.

Administrators reported that they often incorporate description in their formative feedback messages to teachers. Descriptive feedback objectively describes what the observer sees during the lesson. Description of teachers' practices can also come from students, colleagues, or other stakeholders. This feedback quality allows teachers to reflect critically on their work because of its alternative point-of-view. Administrators reported that the objective nature of descriptive feedback allows for productive conversations with teachers about effective practices and next areas of growth.

7.2 ADMINISTRATORS VALUE CONSTRUCTIVE AND GOAL-ORIENTED FEEDBACK AS EFFECTIVE CONTRIBUTORS TO THE PROFESSIONAL GROWTH OF TEACHERS

Administrators rank ordered what they believed to be the most effective feedback qualities from a given list of 12. They named constructive and goal-oriented as the two most effective qualities of feedback. Constructive feedback notices and names an area of improvement. This feedback quality invites teachers and administrators to focus on a specific skill. Constructive feedback does not prescribe solutions or include directives for how to improve, but rather it names the area for improvement. This identification of a focus area enables the teacher and the administrator to work together to strengthen it.

While constructive feedback was ranked in first place as most effective in leading to teachers' professional learning, goal-oriented was ranked by administrators as second. The ranked order makes sense as this type of feedback is a natural extension of constructive feedback. Goal-oriented feedback regards the teachers' professional growth goals. Once a focus area for improvement is identified, then a goal is set. In the interviews, principals explained the benefit of working a step at a time to reach the goal.

7.3 ADMINISTRATORS PROVIDE COMPARATIVE AND SPECIFIC FEEDBACK THAT FEEDS TEACHERS FORWARD

Principals explained their feedback methods as being individualized, specific, and comparative to highly effective standards of performance. First, principals work to recognize each teacher's

professional strengths and needs. Then, principals contribute to teachers' growth through individualized feedback. This process enables them to give feedback that actually feeds teachers forward into their next level of work.

Specific feedback is limited to one or two focus areas. Principals described their practice of focusing on a limited number of improvement areas so that teachers can concentrate their efforts and evaluate their progress. Feedback that is specific is job-embedded and, as such, involves a valuable component of effective professional development. Ultimately, principals want these specific areas of focus to contribute to teachers' overall effectiveness.

Comparative feedback is another quality that principals described themselves using in their feedback practices. This type of feedback compares the teaching episode with highly desired standards of practice. By reflecting on the qualities of the actual work as compared with the qualities of exemplary work, administrators and teachers can identify the gap that exists. This gap, then, becomes the substance of teachers' next areas of needed growth.

7.4 CONCLUSION

The responses to this study's research questions show that principals and assistant principals value feedback qualities that are different than the ones they use in their daily feedback practices. Additionally, principals and assistant principals believe that certain feedback qualities have an impact on teachers' practices that are different from those that they report using most often. Despite the differences in their use and value of the given group of 12 research-supported qualities of formative feedback, the principals who participated in the interviews described effective and ineffective characteristics that reflected the qualities that were similarly identified in a review of

the literature on feedback. The next two paragraphs present a synthesis of the formative feedback qualities that the principals described, critiqued, and supported in their interview responses.

A formative approach to feedback is not deficit-oriented where an administrator is just looking for weaknesses. Therefore, telling a teacher what to do, prescribing a particular strategy or practice to a teacher, and describing the strengths and weaknesses of a lesson are not feedback practices that are formative. Formative feedback does not focus exclusively on what the teacher is doing or not doing. Principals explained that formative feedback can only be called such when it leads to learning.

Principals explained the feedback that they called “formative.” First, effective formative feedback values the teacher’s learning because it originates from a belief that when teachers learn, students learn. Formative feedback is individualized to each teacher’s skills, needs, and readiness to learn. The process of creating and receiving formative feedback encourages the giver and recipient to critically reflect. Effective, useful formative feedback can be applied to different situations, it is transferable, and it names specific areas of focus in order to promote learning. Improvement is determined by comparing the actual work with high quality standards of practice. Formative feedback offers suggestions for how to do what needs to be done. It offers to support, if not to outright help and guide, the learning that will lead to improved practices and student learning.

7.5 FINDINGS RELATED TO PRACTICE

The findings of this study generate a depiction of the current use, beliefs, and practices of administrators who provide high quality formative feedback to teachers. The two findings of the

study are the following: (a) When principals intentionally incorporate highly effective formative feedback qualities in their feedback messages, they contribute to the professional learning of teachers; and (b) Principals learn and grow too when they sustain a professional learning culture that benefits the whole learning community. These findings will be discussed next.

7.5.1 When Principals Intentionally Incorporate Highly Effective Formative Feedback Qualities in their Feedback Messages, They Contribute to the Professional Learning of Teachers

To contribute to teachers' professional learning, administrators must be intentional in how they form and deliver their feedback messages. Principal Anne spoke directly about how she needs to devote herself to the process of developing formative feedback. She said, "I've had to get a little bit deeper. I feel like if I give *formative* (original emphasis) feedback, I need to invest more. Maybe even emotionally or [intellectually]." Similarly, Principal Grant explained how he makes his feedback connect with each teacher by intentionally considering the message from the teacher's point of view. He thinks about what they need to know and do in order to advance student learning. He feels he can deliver a high quality message by keeping the goal of student learning at the center of his feedback process.

Administrators carefully plan the feedback they want to deliver in order to contribute to teachers' professional learning. They give themselves time to consider each teacher's needs and areas to strengthen. They watch the lesson with a questioner's stance, asking themselves what they are seeing in order to describe the strengths of the instruction, name the areas of need, and think about what feedback could help the teacher improve. Sometimes principals ask their colleagues to help them interrogate their intention for the effect of a particular feedback message

on a teacher's learning and practice. Principal Brian explained that he will occasionally ask his administrative colleagues for help when he crafts an important message of feedback. He said, "Because we all do observations and we all do walkthroughs, we all work as a team. If I've got a concern I'm going to approach a teacher with, I run it past the other team members. Before I even go in [to the feedback discussion with the teacher], I often have the other administrators critique what I'm doing. It is one big group effort. It's just something that we do."

The interviews emphasized the core belief among the principals that effective formative feedback builds capacity among all teachers. Principals shared how they intentionally schedule opportunities for teachers to learn from each other. They acknowledge strong performers and ask them to demonstrate techniques for their colleagues. By guiding these connections, principals feel they are creating a learning community that can sustain itself far past the expertise of the administrator. The central concern and implication of this perspective of principals is to make learning the focus of all professional work.

7.5.2 Principals Learn and Grow Too When They Sustain a Professional Learning Culture that Benefits the Whole Learning Community

When principals are intentional about the feedback process that values student achievement and teachers' professional growth, learning occurs for everyone involved in the experience. This "everyone" includes the principal. While the implication above discussed ways that principals seek to impact the professional learning of teachers, the next three sections discuss how principals learn from teachers as an outcome of the intentional feedback process.

The final interview question asked participants if they learn as a result of producing formative feedback for teachers. All seven interviewees responded that they do learn. Several

principals talked about how they learn about teaching and high quality instruction by watching teachers at work. Other principals talked about how producing formative feedback and following-up with teachers strengthens their feedback skills. In all cases, however, the principals talked about the positive effect that a continuous culture of learning has on all members of the school community.

7.5.2.1 Principals Learn about Teaching and High Quality Instruction

Moss and Brookhart (2013) described the value of what they call “formative walkthroughs” which are classroom visits that the principal conducts in order to learn by watching the teachers and students as they work. Principals watch the lesson from the students’ perspective and then share what they learned with teachers so that the practices of all of the adults in the learning environment can be strengthened. Moss and Brookhart (2013) emphasize that this is an intentional learning process on the part of the building leader who strives to contribute to a collaborative professional culture. In the interviews, the principals talked about what they learn when they visit classrooms with the intention of helping teachers improve.

Principals say that they learn more about the instructional strategy and content area. They learn about the teacher’s needs, openness to feedback, and willingness to change and grow. For some principals, conducting walkthroughs and providing feedback helps them to learn more about effective instruction. Principal Evan said, “You’re learning the information you need from the experts because they’re the ones in the classroom all day.” Principal Felicia concurred in saying, “I learn from our teachers every day. There are some strategies that our teachers use that I would have a hard time using myself. And we have some really strong teachers here that do a lot of good things with our kids.”

Through their own investment in learning, principals in the interviews felt they could help teachers improve and ultimately help students achieve. This belief resided in the fact that these principals knew they would continue to develop their own skills and areas of expertise by learning from – and even with - the teachers that they observed. Principal Brian talked about when he needs to know new information in order to help a teacher improve. This principal admitted that he had spent his career at the secondary level before working in an elementary school. He explained the necessity to learn when his job changed from “addressing Keystones to developing strategies for Kindergarten teachers.” He said, “I could go into the classroom and say, ‘I can see what you’re doing and it’s not appropriate,’ [but], for me, I had to do the research and be able to speak to that and talk to him about that. I had to be a learner through the entire process.” The principals emphasized that their feedback process is an intentional one and that they must reflect themselves on the effectiveness of their feedback practices in order to get better.

7.5.2.2 Principals Learn How to Give Better Formative Feedback

All of the interviewees talked about the importance of developing highly effective feedback skills. The feedback skills they mentioned ranged from timing and topic choices to wording and tone. Principal Dana shared that teachers have, at times, left her office and slammed the door after ineffective feedback discussions. She commented that she needed to improve her skills of communicating critical feedback. She said, “I think the biggest thing I’ve learned is how to deliver it and how to differentiate how I deliver it based on the needs of the teaching staff.” Principal Evan explained how he reflects on each feedback experience and admits, “Each time, [I] probably get a little bit better at it just because of the experience. I’m learning about dealing with different personalities and what works and what doesn’t work. Even if I’ve had a conversation that didn’t go well, I learn ‘I should’ve said this.’”

Principal Grant said that he does his best learning when he is invited by a teacher to provide feedback on something the teacher is newly implementing. He said, “That’s something to celebrate,” because he values the culture of professional comfort and trust that this teacher behavior evidences. Principal Grant’s and Moss and Brookhart’s findings (2013) both underscore the value of a productive relationship between the principal and teachers. When the professional community is supportive, its members will be more willing to take risks and seek feedback. These behaviors contribute to a learning-rich environment that is energizing.

7.6 FINDINGS RELATED TO POLICY

A reoccurring theme among the interviews is that effective formative feedback guides the teacher to reflect, come to conclusions, and experience revelations about their teaching and their students’ learning. Recognizing this value, the Pennsylvania Department of Education explicitly noted that reflective conversations may need to be guided by principals in *The Educator Effectiveness Manual* (quoted previously in section 8.0, p. 142). However, several principals who were interviewed admitted that their colleagues do not necessarily share their same comfort and experience with providing formative feedback to teachers. Principal Dana said, “I don’t think everybody is comfortable speaking that way, to be honest with you. Everybody has their own strengths and weaknesses. Some people can manage that [feedback] conversation effectively, and others cannot.”

The Pennsylvania Department of Education developed the Educator Effectiveness system to combine supervision and professional growth in the evaluation process. This study has concluded that administrators help teachers grow and develop their capacity to lead their own

professional learning when principals produce deliberate and thoughtful formative feedback. Therefore, through administrators' intentional practices and continued education, the goal of the Educator Effectiveness system of supervision that improves teaching and learning comes closer to being realized. The next chapter will present the implications of this study and recommend professional development topics for administrators so that they can continue to strengthen their ability to provide formative feedback that contributes to teachers' learning.

8.0 IMPLICATIONS FOR PRACTICE AND POLICY

This chapter will present implications of the study related to principals' professional development regarding formative feedback practices. Suggestions for further research will also be made based on the limitations of this study. Lastly, a concluding reflection will indicate ways that this study contributes to the valuable work of administrators who seek to provide formative feedback to teachers and to learn themselves.

8.1 IMPLICATIONS FOR PRINCIPALS' PROFESSIONAL DEVELOPMENT

Act 45 of 2007 established the professional development requirement for school and system leaders to complete a certain number of hours of continuing professional education. For this purpose, the Pennsylvania Inspired Leadership (PIL) program offers these courses through the Pennsylvania Department of Education in collaboration with the state's Intermediate Units (see Footnote 1). Act 45 of 2007 seeks to strengthen the knowledge and skills of administrators through these professional learning opportunities. Therefore, topics on highly effective qualities of formative feedback and the use of formative feedback for professional learning would help administrators learn more about impactful leadership practices.

Another topic related to supporting teachers' involvement in the supervision process is participatory democratic supervision practices that engage teachers in their professional growth.

In their book entitled *Supervision that Improves Teaching and Learning*, Sullivan and Glanz (2009) promote participatory democratic evaluation processes. Participatory democratic processes support teachers' professional improvement by involving them as active, engaged learners. They empower teachers to talk about what they want to learn, why they want to learn it, decide whether they have learned it, and evaluate if the learning has led to improved performance (Sullivan & Glanz, 2009). Sullivan and Glanz's foresight in 2009 is now the professional practice of all public school teachers and administrators in Pennsylvania. The Pennsylvania Public School Code of 2012 established a system of supervision and evaluation for all educators that focuses on professional growth. Teachers must share evidence of their growth with their supervisors. Supervisors must work individually with teachers in order to document evidence of teachers' efforts and improvement.

Previous sections of this dissertation contained phrases from *The Framework for Leadership* to show the connection between this study and the expectation of the Pennsylvania Department of Education that principals contribute to the professional learning of teachers. In particular, Component 3c in the section entitled, "Leadership for Learning," charges principals to "monitor and coach" teachers so they are effective educators, assessors, and implementers of professional development (Pennsylvania Department of Education, 2014b). *The Educator Effectiveness Administrative Manual* explains that "collaborative reflections" must occur between principals and teachers in the observation cycle (Pennsylvania Department of Education, 2014a). The manual stipulates that these reflections should be focused on the individual teacher's efforts to reach professional development goals that will improve instruction and lead to student achievement. In order to provide support so that principals can engage in collaborative reflections

with teachers, *The Educator Effectiveness Administrative Manual* offers sample guiding questions for principals to use. There is also a notation marked with an asterisk that reads:

Some teachers have a clear idea of what needs to be changed to improve the progress of their students, but others may be challenged in that regard. A discussion from both the teacher perspective and the perspective of the principal based on his/her classroom observation and knowledge and experience may lead to better identification of productive changes that should be made. Once a possible reason(s) for a lack of growth is agreed upon, the teacher, with support from the principal, can move to finding a solution(s). (Pennsylvania Department of Education, 2014a, p. 23)

The participatory democratic ethic anchoring the Pennsylvania Educator Effectiveness system is evidenced by the statement that teachers need to be involved as leaders in their own professional learning. The notation above sets the expectation that principals should empower and, if necessary, guide teachers to be so involved. By extension of this expectation, principals must hone their feedback practices in these areas so that teachers' growth is possible and student achievement measures are reached. Although the Pennsylvania Department of Education provides examples of discussion prompts and the above mentioned notation to guide teachers, administrators are still missing the ability to compare their work to highly effective formative feedback messages and practices. Having the opportunity to do this in a professional education environment might bring clarity for administrators as to what feedback habits they unconsciously employ, what exemplary practices look like, and the gap between the two that suggests areas of future growth.

One of the findings of this study involves administrators' investment in the formative feedback process. The principals who were interviewed described their commitment to delivering

messages that resonate with teachers. To do so, they talked about needing to be emotionally and intellectually invested, to take the necessary time to critically reflect on the lesson, and to consider each teacher's needs and goals. Explicit knowledge of this necessary investment may be important to teach to administrators so that their supervision efforts additionally improve teaching and learning, as expected by the Educator Effectiveness model. Since the Pennsylvania Department of Education stipulates that administrators must contribute to the professional growth of teachers, courses receiving Act 45 credit for school and system leaders may benefit from the information gained from this and similar studies to establish professional learning needs and to develop professional education experiences designed to meet them.

8.2 LIMITATIONS OF THIS STUDY AND SUGGESTIONS FOR FURTHER RESEARCH

This study explored the practices and beliefs of nearly fifty administrators from one county in Pennsylvania. The average number of responses to each survey question out of the total population of 113 possible participants was 43 (38%). The data were summarized into descriptive points about the formative feedback practices of administrators in order to suggest several implications for policy and practice. If a researcher wished to interrogate these suggested implications, a larger sample would need to be involved either within the county or across the state.

This study limited the pool of administrators to those in the same county who received support from the same Intermediate Unit. It was my hope that these administrators might have had similar professional experiences with the Pennsylvania Educator Effectiveness system. This is because the same Intermediate Unit has provided professional development sessions on the

evaluation system and its impact on the work of administrators. Future research on the formative feedback uses, beliefs, and processes of administrators could engage a larger group of participants. Administrators throughout the state are required to complete continuing professional education, and one provider for state-approved courses is the Pennsylvania Inspired Leadership (PIL) program. The designers of PIL courses would benefit from a larger, statewide sample of administrators who may identify areas of needed professional support and/or development that are different from or in addition to those recognized by this study. These professional support and development areas could be addressed through the policy guiding the requirements for continued professional learning of school and system leaders.

Another area for potential future research that would involve a larger response group is to determine if stratified groups of respondents have different needs from each other. Initially, this study's plan was to analyze survey responses by the following stratified groups: principals, assistant principals, secondary administrators, elementary administrators, administrators with certain years of administrative experience, and those with certain years of teaching experience prior to becoming administrators. However, the data collected from nearly fifty administrators did not identify remarkable differences in formative feedback uses and beliefs among the various stratified groups of respondents. Since the response patterns of the whole group closely matched the response patterns of each stratified group, the survey data were reported in the patterns of the whole group. The data from a larger group of participants might indicate differences in usage and perspective among these stratified groups. If so, these differences could be used to identify specific areas of continued learning that can be addressed in the professional education of administrators.

This study focused on the feedback processes and perspectives of administrators who seek to contribute to the professional learning and practices of teachers. A potential area for future

research is on the feedback beliefs of teachers who receive formative feedback from their supervisors and seek to use it for their own professional growth. It would be important for administrators to know if teachers value the same qualities in the feedback messages they receive. This study concluded that administrators use different feedback qualities than the ones they value as most effective. A future study might explore if teachers notice this difference. If so, does the difference between what administrators use and what they value as effective impact the intent and/or quality of administrators' feedback messages? Teachers' perspectives on why the differences between qualities used and qualities valued by administrators would be interesting to investigate. Additionally, it would be helpful to know what professional learning or support teachers believe is necessary for administrators to help teachers improve and grow in their instructional practices.

When the interview data were coded and patterns of words, topics, and themes were discovered, one particular phrase was spoken by several different principals. The phrase "take it to the next level" was expressed by a number of principals in the interviews. In all cases of its use, the phrase was used to explain how a principal's formative feedback aims to help teachers improve their instruction. An area of future research could be to deeply explore what principals mean when they use this phrase. This possible inquiry is inspired by research on the formative feedback quality of "feeds forward" that describes the value of feedback that identifies the next level of work for the teacher (Black & Wiliam, 1998; Brookhart, 2008; Brookhart & Moss, 2015; Butler & Winne, 1995; Clark, 2012; Hattie & Timperley, 2007; Moss & Brookhart, 2015; Sadler, 1998). It would be interesting to know what principals consider as this "next level of work" and how they define it. The impact of knowing this could then inform administrators' and teachers' practices of determining trajectories of learning and monitoring progress toward this "next level." In Section

7.1, it was noted that principals aren't universally using *The Framework for Teaching* to compare teachers' practice with the various levels of proficiency that the Framework describes. Perhaps by understanding first what principals mean when they say "take it to the next level" and then analyzing *The Framework for Teaching*, future research could suggest areas of the document that administrators and teachers need to understand more concretely or explicitly so that professional practices can be strengthened.

In the literature review, section 2.3.4.1 discussed how the role of the principal expanded from that of a building manager to one of instructional leadership. The history of this evolution provided a foundation for subsequent sections that synthesized the literature on principals as professional development leaders, professional learning, and the connectedness of principal and teacher effectiveness in Pennsylvania's evaluation model. This study has situated the value of formative feedback from principals to teachers in the context of instructional leadership. However, Principal Evan mentioned a different area of his leadership that is positively affected by his feedback practices. He sees his classroom visits as opportunities to inform the operational aspects of his job. He explained how watching teachers at work gives him the feedback he needs to make critical decisions: "They're giving you what's actually happening. That's constant feedback so you can learn more about [the needs in] your building. That's the most important information you can get when, as a principal, you're making decisions for the building." Future research on the topic of walkthroughs and feedback might focus on how principals develop operational leadership skills while watching teachers and students.

8.3 MY CONCLUDING REFLECTION

I wrote a section in the first chapter entitled, “Personal and Professional Perspective.” In it, I explained my interest in the topic of formative feedback and my desire to contribute to the professional practices of teachers. I stated “I want to continue to learn and grow, too, and I know that these formative feedback experiences teach me as well as, hopefully, the teachers I engage.” I found it very satisfying that all principals who were interviewed expressed that they learn as a result of producing and providing formative feedback to teachers.

Collegial feedback is defined as “feedback that situates both the principal and the teacher as learners,” and it received the lowest mean score of use by survey respondents (Brookhart & Moss, 2015; Clark, 2012; Hattie & Timperley, 2007; Moss & Brookhart, 2015; Sadler, 1989). The seven principals who said that they do learn and described for me facets of their learning were among the 41 respondents to the question that included “collegial feedback.” Five of the seven answered that they occasionally incorporate collegial feedback in their feedback messages to teachers. The remaining two principals rated their usage of collegial feedback as being routine in their messages to teachers. While the overall group reported very low usage of collegial feedback, all seven principals who were interviewed emphasized their learning as a result of providing formative feedback to teachers.

From this, I drew two important lessons that will inform my future practice. First, I found that I learned from listening to the principals I interviewed as they described their feedback practices, concerns, triumphs, and challenges. They described facets of leadership that I had not considered in my own practice. For example, Principal Evan’s comment about how walkthroughs inform his operations leadership will encourage me to reflect on how I am making operational decisions and if I am reflecting on what I learn from watching teachers and students to do so.

Therefore, I am committed to intentionally talking about valuable practices with my administrator colleagues so that I remain open to areas of possible growth that I hadn't already considered.

Additionally, I am committed to talking about my own learning with my colleagues. This lesson comes from the survey's reported occasional use of collegial feedback. The discrepancy between the low usage report and the enthusiastic interview responses leads me to wonder if the nature of our supervisory position leads us to unconsciously (or consciously) subscribe to the top-down notion that principals already know the information that is needed to guide teachers forward in their work. I believe that I can help my colleagues recognize the value of formative feedback as leading to the learning of all involved by talking more explicitly about my learning.

I concluded the literature review by referencing Hargreaves and Fullen's (2012) point that transformation in schools will occur when "making teaching and learning reciprocally visible is more than a cliché" (p. 53). They say that reciprocal, visible teaching and learning "is sophisticated practice in any professional sphere" (p. 53). The two lessons that will immediately affect my practice are the lessons of active engagement with my colleagues for the sake of learning and open discussion of what I have learned. I will use these lessons to strengthen my own practices, the work of teachers, and ultimately the learning of students. These lessons are both situated in the nexus that I defined in the opening chapter. This nexus is located in the overlap of three constructs: principals as instructional leaders, principals as professional development leaders, and principals as professionals who continuously learn.

APPENDIX A

INVITATION TO PARTICIPATE IN THE STUDY – PRINCIPALS

Dear Principal,

My name is Heather Newell, and I am a doctoral student at the University of Pittsburgh. I am also an elementary principal in Pennsylvania. I am conducting a dissertation research study on the topic of formative feedback that principals give to teachers for the purpose of professional learning. This email is an invitation for you participate in this brief survey. I am sending it to all principals in the county.

I know how busy school administrators are and how the many demands of the job require considerable time and attention. Therefore, this survey is intentionally brief and may take you around ten minutes to complete. This link below will take you to the survey:

https://pitt.co1.qualtrics.com/SE/?SID=SV_7PqcmquIj4NYgZ

Please know that you will incur minimal risk through this study and may decline to answer any questions during the survey. The primary potential risk is a breach of confidentiality, but everything possible will be done to protect your privacy. All records pertaining to your involvement in this study will be kept locked, and any data that includes your identity will be

stored in secured files. Your identity will not be revealed in any description or publication of the research. Individual responses will not be shared with your superintendent.

One of the survey questions asks if you would be willing to participate in a follow-up interview. This interview contains questions about when, how, and for what purpose you give formative feedback to teachers. I expect our interview conversation to last no longer than thirty minutes, and we can arrange to conduct it over the phone. If you are willing to be considered for an interview, please provide your name and contact information when prompted by the survey.

Thank you for your consideration and assistance. If you have any questions, please feel free to contact me via email (hcn2@pitt.edu) or by phone at 724-708-1712. I appreciate your assistance in this study.

Sincerely,

Heather Newell

Heather C. Newell
Email: hcn2@pitt.edu
Phone: 724-708-1712

Dr. Cynthia Tananis, Ed.D, Dissertation Advisor
University of Pittsburgh
Email: tananis@pitt.edu
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APPENDIX B

OPENING STATEMENT TO INTERVIEWEES

Opening Statement to Interviewees:

My name is Heather Newell, and I am an elementary principal in the Norwin School District. Thank you for being responding on the survey that you are willing to participate in an interview. This research study is entitled, “Beliefs and Practices of Principals who Provide Formative Feedback to Teachers.” The purpose of this research study is to understand the nature of the feedback that principals give to teachers for the purpose of professional growth. For that reason, I am interviewing principals in the same county whose answers on the survey indicate they incorporate effective qualities of feedback in order collect information of their daily practices. Do you have any initial questions or concerns about the study? Do you think you are still interested in participating?

If No: Thank you very much for expressing initial interest. Have a nice day.

If Yes: Okay, let’s continue. I have a few other pieces of information to tell you that you should know about this interview and the study. After I share this information, we’ll be ready to begin the interview.

I should remind you that all responses are confidential, and results will be secured and accessed only by me. Your participation is voluntary, and you may withdraw at any time. The data collected by this research project may be shared with investigators conducting similar research; however, this information will be shared in a de-identified manner. This means that all information will not be related to you, your school, or your district. Please feel free to stop me at any time during the interview if you have questions or concerns.

I estimate that this interview will last anywhere from 30 – 60 minutes. After we finish the interview, I will transcribe it. Please tell me if you want to read the transcription, and I will provide it within 48 hours. Once I talk to all the principals who have agreed to be interviewed, I may have some additional questions or information I need to clarify or confirm. If this is the case, I will contact you to ask if you are willing to have a follow-up conversation. Since I will only be seeking to discuss only a point or two during this follow-up conversation, it may only take us 5 – 15 minutes. Your participation in this follow-up conversation is completely voluntary and your responses will remain confidential and de-identified in my research findings and in any data that I choose to share with investigators conducting similar research.

Do I have your permission to begin the interview?

APPENDIX C

SURVEY TEXT

1. What is your current title?

- a. Principal
- b. Assistant Principal
- c. Associate Principal
- d. Co-Principal
- e. Other

2. At what level in the school system do you work?

- a. Secondary level
- b. Elementary level
- c. Both secondary and elementary levels

3. How many years in total have you worked as a school administrator? Include the 2015-2016 school year as one complete year when you enter this number.

4. How many years in total did you work as a teacher?

Act 82 of 2012 sets the expectation that principals implement high quality instruction by monitoring the progress of teachers and staff. *The Framework for Leadership* describes this act of leadership in several places and particularly in Component 3c which reads:

“The school leader conducts formative and summative assessments in measuring teacher effectiveness in order to ensure that rigorous, relevant, and appropriate instruction and learning experiences are delivered to and for all students.”

Research in the fields of professional and adult learning has identified the qualities of feedback that lead to learning. The next question asks you to reflect on the feedback you provide to teachers. Think of recent episodes of feedback that you have provided to teachers. To what degree did you include the qualities listed in Question 5 in these written or verbal feedback messages?

5. Complete this statement as it applies to your feedback messages to teachers: In my feedback messages to teachers, this quality _____.

	Was not included	Was rarely included	Was occasionally included	Was routinely included	Was the dominant Characteristic
Collegial: Feedback that situates both the principal and teacher as learners					
Comparative: Feedback that compares the episode of teaching to best or highly desired standards of practice					
Concrete: Feedback that leads the teacher towards future instructional decisions					
Constructive: Feedback that notices and names an area of improvement for the teacher as a result of watching the episode of teaching					

Descriptive: Feedback that objectively describes what the observer saw					
Feeds Forward: Feedback that identifies the next level of work for the teacher					
Goal-oriented: Feedback that is focused on the teacher's professional growth goals					
Positive: Feedback that notices and names strengths observed in the episode of teaching					
Process-focused: Feedback that looks at what the teacher is doing to engage the students in their learning					
Specific: Feedback that is limited to one or two areas of focus					
Timely: Feedback that is provided in a teachable moment					
Work-Focused: Feedback that is centered on what the students are doing, making, saying, and/or writing					

6. Drag the five qualities of feedback that you believe to be the most likely to result in learning for teachers in the box to the right. Then, rank order this list of five in the box.

List of 12 qualities (same as above) appears here.

7. Are you willing to participate in a brief follow-up interview?

Yes

No

8. In the space below, please type your name, your email, and a contact phone number. Please also note the best time of the day for me to call you.

Thank you for participating in this survey about qualities of feedback. I appreciate your time and your willingness to share this information with me.

APPENDIX D

INTERVIEW PROTOCOL

1. Describe a time you gave formative feedback to a teacher.

Probe: Did you provide it after watching an episode of teaching?

Probe: Describe what you watched.

Probe: What part of the teaching episode did you choose to focus on?

Probe: Why did you choose to provide this formative feedback?

2. How did you compose this formative feedback message?

Probe: What did you want to communicate in this message?

Probe: Are there requirements in your District for what needs to be communicated?

Probe: What about your message did you hope to have the most impact?

3. In general, how do you use formative feedback to increase the effectiveness of teachers?
4. How do you use formative feedback to identify opportunities for teachers' professional growth?
5. Do you learn as a result of producing formative feedback for teachers? If so, please explain how you learn.

APPENDIX E

RESEARCH QUESTIONS AND DATA COLLECTION ALIGNMENT TABLE

Table 4: Alignment of Research Question and Data Collection

Research Questions	
RQ1. What do principals identify as the qualities they include in their formative feedback to teachers?	
RQ2. What do principals identify as the qualities of feedback that most effectively contribute to teachers' professional learning?	
RQ3. What are the ways that principals provide ongoing formative feedback on the effectiveness of teachers and opportunities for growth for teachers?	
Survey Questions	
1. What is your current title? (e.g. principal, assistant principal, associate principal, etc.)	
2. At what level in the school system do you work? (e.g. high school, K – 4, etc.)	
3. How many years in total have you worked as a school administrator?	
4. How many years in total did you work as a teacher?	
5. Think of recent episodes of feedback that you provided to a teacher for the purpose of commenting on their effectiveness and/or identifying opportunities for their professional growth. To what degree did you include the qualities listed below in these written or verbal feedback messages?	
Research Question Alignment	Alignment in the Literature Review
RQ1. What do principals identify as the qualities they include in their formative feedback to teachers?	2.1 Definition of Formative Feedback
6. Drag the five qualities of feedback that you believe to be the most likely to result in learning for teachers in the box to the right. Then, rank order this list of five in the box.	
Research Question Alignment	Alignment in the Literature Review
RQ2. What do principals identify as the qualities of feedback that most effectively contribute to teachers' professional learning?	2.1 Definition of Formative Feedback

Table 4 (continued)

Interview Questions	
1. Describe a time you gave formative feedback to a teacher for the purpose of professional learning.	
Research Question Alignment	Literature Review Theme Alignment
RQ3. What are the ways that principals provide ongoing formative feedback on the effectiveness of teachers and opportunities for growth for teachers?	2.1 Definition of Formative Feedback 2.2 Research and Theories of Adult and Professional Learning
2. How did you compose this formative feedback message?	
Research Question Alignment	Literature Review Theme Alignment
RQ3. What are the ways that principals provide ongoing formative feedback on the effectiveness of teachers and opportunities for growth for teachers?	2.1 Definition of Formative Feedback 2.2 Research and Theories of Adult and Professional Learning
3. How do you use formative feedback to increase the effectiveness of teachers?	
Research Question Alignment	Literature Review Theme Alignment
RQ3. What are the ways that principals provide ongoing formative feedback on the effectiveness of teachers and opportunities for growth for teachers?	2.2 Research and Theories of Adult and Professional Learning 2.3 Reciprocal Professional Learning in the Principal-Teacher Relationship
4. How do you use formative feedback to identify opportunities for teachers' professional growth?	
Research Question Alignment	Literature Review Theme Alignment
RQ3. What are the ways that principals provide ongoing formative feedback on the effectiveness of teachers and opportunities for growth for teachers?	2.2 Research and Theories of Adult and Professional Learning 2.3 Reciprocal Professional Learning in the Principal-Teacher Relationship
5. Do you learn as a result of producing formative feedback for teachers?	

Table 5: Qualities of Effective Formative Feedback as Identified by the Literature

Feedback Quality	Definition	Research
Collegial	Feedback that situates both the principal and teacher as learners	Brookhart & Moss, 2015 Clark, 2012 Hattie & Timperley, 2007 Moss & Brookhart, 2015 Sadler, 1989
Comparative	Feedback that compares the episode of teaching to best or highly desired standards of practice	Black & Wiliam, 1995 Brookhart & Moss, 2015 Clark, 2012 Hattie & Timperley, 2007 Moss & Brookhart, 2015 Ramaprasad, 1983 Sadler, 1989
Concrete	Feedback that leads the teacher towards future instructional decisions	Black & Wiliam, 1998 Brookhart, 2008 Brookhart & Moss, 2015 Moss & Brookhart, 2015 Sadler, 1989
Constructive	Feedback that notices and names an area of improvement for the teacher as a result of watching the episode of teaching	Black & Wiliam, 1998 Brookhart, 2008 Brookhart & Moss, 2015 Hattie & Timperley, 2007 Kluger & DeNisi, 1996 Moss & Brookhart, 2015 Sadler, 1998
Descriptive	Feedback that objectively describes what the observer saw	Brookhart, 2008 Brookhart & Moss, 2015 Moss & Brookhart, 2015 Shute, 2008

Table 5 (continued)

Feeds Forward	Feedback that identifies the next level of work for the teacher	Black & Wiliam, 1998 Brookhart, 2008 Brookhart & Moss, 2015 Butler & Winne, 1995 Clark, 2012 Hattie & Timperley, 2007 Moss & Brookhart, 2015 Sadler, 1998
Goal-oriented	Feedback that is focused on the teacher's professional growth goals	Black & Wiliam, 1998 Brookhart, 2008 Brookhart & Moss, 2015 Butler & Winne, 1995 Clark, 2012 Garrison, 1997 Hattie & Timperley, 2007 Kluger & DeNisi, 1996 Locke & Latham, 2002 Locke & Latham, 2006 Moss & Brookhart, 2015 Sadler, 1989 Schön, 1983 Shute, 2008
Positive	Feedback that notices and names strengths observed in the episode of teaching	Black & Wiliam, 1998 Brookhart, 2008 Brookhart & Moss, 2015 Kluger & DeNisi, 1996 Moss & Brookhart, 2015
Process-focused	Feedback that looks at what the teacher is doing to engage the students in their learning	Brookhart & Moss, 2015 Clark, 2012 Hattie & Timperley, 2007 Moss & Brookhart, 2015
Specific	Feedback that is limited to one or two areas of focus	Black & Wiliam, 1998 Brookhart, 2008 Brookhart & Moss, 2015 Clark, 2012 Moss & Brookhart, 2015 Ramaprasad, 1983 Sadler, 1989 Shute, 2008

Table 5 (continued)

Timely	Feedback that is provided in a teachable moment	Black & Wiliam, 2009 Brookhart & Moss, 2015 Clark, 2012 Moss & Brookhart, 2015 Schön, 1983 Shute, 2008
Work-focused	Feedback that is centered on what the students are doing, saying, writing, and/or making	Black & Wiliam, 1998 Brookhart, 2008 Brookhart & Moss, 2015 Hattie & Timperley, 2007 Moss & Brookhart, 2015 Sadler, 1998 Shute, 2008

APPENDIX F

RESPONSE RATES FOR INDIVIDUAL SURVEY QUESTIONS

Table 6: Response Rates for Individual Survey Questions

Survey Questions, by number	Number of Respondents Completed	Total Number of Respondents	Response Percentage of Those who Started a Survey	Overall Response Rate out of 113 Possible Participants
#1: What is your current title?	45	46	97.8%	39.8%
#2: At what level in the school system do you work?	45	46	97.8%	39.8%
#3: How many years in total have you worked as a school administrator?	45	46	97.8%	39.8%
#4: How many years in total did you work as a teacher?	45	46	97.8%	39.8%
#5: Complete this statement as it applies to your feedback messages to teachers: In my feedback messages to teachers, this quality...	41	46	89.1%	36.3%
#6: Drag the five qualities of feedback that you believe to be the most likely to result in learning for teachers in the box to the right. Then, rank order this list of five [by placing] the item that you believe to most likely lead to teacher learning at the top of the list. Position the remaining items underneath the top item in descending order.	39	46	84.8%	34.5%

Table 6 (continued)

#7: Are you willing to participate in a brief follow-up interview? If you answer 'Yes,' you will continue to the next question... If you answer 'No,' you will be directed out of the survey.	39 "Yes"=16 or 41% "No"=23 or 59%	46	84.8%	34.5%
#8: In the space below, please type your name, your email, and a contact phone number.	16	46	34.8	14.2%

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