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ASSESSMENT FOR LEARNING: AN EVALUATION OF A PROFESSIONAL DEVELOPMENT PROGRAM AT LINCOLN-WAY DISTRICT 210

Aimee Davis Feehery

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The purpose of this program evaluation was to determine how teachers have come to understand, use, and value formative assessment through their participation in our Assessment for Learning Teams for the past five years. Greeno, Collins, and Resnick's (1996) learning theory serves as the theoretical framework of the evaluation, as this program evaluation serves to determine if, and how, teachers have changed their mental models of assessment from a Behaviorist-Differentiationist model to the Cognitive-Situative model, or from an Assessment of Learning view of assessment, to an Assessment for Learning perspective. In order to determine if teachers have gained the conceptual and practical tools from the professional development program to make this shift, evaluation questions include: After participating in the professional development program, how do these teachers understand, use, and value Assessment for Learning? The interviewer conducted focus group interviews of the Learning Team members from three high schools where the professional development had taken place. Classroom observations and document analysis were the other methods for data collections for this evaluation. The Learning Teams' understandings, stories, interpretations, and

descriptions presented in this dissertation have been cross cut with the observation and document data to present five significant findings: 1) AfL allows for the impetus for learning to be located within the student; 2) with AfL, the teacher and student to work on the same team towards learning standards; 3) teachers must often surrender control of certain student behaviors; 4) high school traditions must often be manipulated or accommodated in order to implement AfL; and 5) AfL is part of what is considered good, effective teaching. These findings have implications for administrations of other districts implementing AfL professional development as well as our own district moving forward to fill gaps in our own professional development. Therefore, recommendations for further development of AfL in our district are offered as well.

Keywords: assessment for learning, formative assessment, professional development

ASSESSMENT FOR LEARNING: AN EVALUATION OF A PROFESSIONAL

DEVELOPMENT PROGRAM AT LINCOLN-WAY DISTRICT 210

AIMEE DAVIS FEEHERY

A Dissertation Submitted in Partial Fulfillment of Requirements for the Degree of

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ASSESSMENT FOR LEARNING: AN EVALUATION OF A PROFESSIONAL

DEVELOPMENT PROGRAM AT LINCOLN-WAY DISTRICT 210

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CHAPTER I

INTRODUCTION

Educational assessment seeks to determine the quality and extent of student learning (Popham, 2005). With the adoption of Common Core Standards (CCSS) and Next Generation Science Standards (NGSS), and the renewed vision of assessment through both the Partnership for Assessment of Readiness for College and Careers (PARCC) and Smarter Balanced Assessment Consortium (SBAC) aiming to measure students' progress towards meeting those standards, educational assessment plays an ever-stronger role in district and school decision-making (Chappuis, 2006; Darling-Hammond, 2010; Stiggins, 2005). Current policy makers are still driving the use of standardized, summative assessments such as PARCC and SBAC, usually for purposes of accountability or judgment. However, educational reformers continue to question these summative assessment practices, especially since the evidence is clear that formative assessment used at the local, classroom level has the greatest potential to support and improve student learning (Black & William, 1998; Brookhart, 2004; Chappuis, 2006; Danielson, 2007; Guskey, 2010; Popham, 2008; Shepard, 2009; Stiggins, 2005).

Education leaders and policy makers must realize the need for a radical paradigm shift from a traditional perspective of summative assessment grounded in behaviorist and differentiationist theories of learning that aim to rank and sort students, to more of

a formative view of assessment grounded in cognitive and situative theories where students are actively engaged in their learning and the assessment process (Greeno, Collins, & Resnick, 1996).

The process of using formative assessment principles and strategies that are grounded in cognitive and situative theories is often referred to as Assessment *for* Learning (AfL) (Greeno et al., 1996; Stiggins, 2002, 2005a, 2005b). Research into formative assessment practices reveals the significant power that AfL has to improve longstanding patterns of poor student achievement, specifically in the lowest achieving students (Black, Harrison, Marshall & Wiliam, 2003; Black, Harrison, Lee, Marshall & Wiliam, 2004; Black & Wiliam, 1998; Chappuis, 2006a).

Although formative assessment has been proven to have a significant impact on student achievement, making the shift from a summative view to a more formative perspective is an enormous undertaking for both our administration and teachers since current approaches to assessment are so grounded in tradition (Brookhart, 2007; Chappuis, 2007; Fullan, 2001). Many of our teachers and administrators lack the knowledge, or "assessment literacy," about these influential approaches to assessment (Stiggins, 1991). Stiggins's phrase "assessment literacy" is described as the ability to: (a) understand how to create and critically evaluate high-quality achievement data; (b) understand what assessment methods to use and when to use them to gather "dependable information about student achievement;" (c) how to communicate assessment results to various audiences, and most important to AfL; (d) how to use assessment to motivate students and involve them as "full partners" (p. 536).

Assessment literacy is clearly essential to improving student learning outcomes, as Stiggins (2002) comments, "Improved student achievement can only be realized if assessments in the day-to-day classroom are transformed into powerful tools for learning" (p. 34). However, Stiggins (2002) describes United States educators as not being "assessment literate," which is why, along with the pressures of RtI, CCSS, NGSS, PARCC, and teacher evaluation policy trends that are immediate concerns in education today, our district has chosen to implement a professional development program to inform and inspire teachers to improve their assessment literacy through the use of formative assessment practices (p. 762).

Context of the Problem

District leaders in Lincoln-Way District 210 know that when teachers implement formative assessment strategies and practices in their classrooms and engage students in the assessment process, student learning improves, especially in the most struggling of learners (Black & Wiliam, 1998; Brookhart, 2004; Chappuis, 2006; Danielson, 2007; Guskey, 2010; McMillan, 2007; Popham, 2008; Shepard, 2005; Stiggins, 2005). Our district also acknowledges the pressure, especially with the adoption of the CCSS and the new PARCC assessment system on the horizon, to adopt these formative assessment practices to ensure improved student outcomes on these assessments; however, the dilemma, like in many school districts, is often the lack of robust, ongoing professional development to support this transition (Chappuis et al., 2009; DuFour & Stiggins, 2009; Popham, 2005; Reeves, 2007; Wiliam, 2007).

Our administrators realize the necessity to be leaders in assessment literacy, and also know that our teachers need the encouragement, models, and tools to make the transition from a summative, Assessment *of* Learning perspective of assessment to a formative, Assessment *for* Learning (AfL) view (Marzano, 2003; Popham, 2005, 2008; Reeves, 2007; Stiggins, 2005). Therefore, it has been the charge and responsibility of our district and school leaders to offer professional development opportunities to construct assessment literacy in order to support the understanding and use of formative assessment strategies, and encourage teachers to make the transition from a summative view of learning and assessment to a more formative perspective where students are expected to be active in the learning and assessment process (McLaughlin & Talbert, 2006; Popham, 2005; Reeves, 2007).

For the last five years, I have been part of the leadership team in our high school district to support this movement by offering various professional development opportunities on the subject of AfL in order to build assessment literacy for teachers, as well as for the administrators, in order to promote AfL in practice. Realizing that professional development efforts often fail unless teachers are given the opportunity to work together on new ideas, reflect on their progress, and discuss their struggles and successes on student learning, one significant aspect of our professional development plan was the organization and continuous support of our Assessment *for* Learning Teams (McLaughlin & Talbert, 2006).

These Learning Teams, grounded in Professional Learning Community theory, were created to allow teachers to voluntarily participate in a grassroots professional

development program, and arrive at their own understanding and belief that formative assessment is the key to improving student learning and achievement (Black & Wiliam, 1998; Chappuis et al., 2009; DuFour & Eaker, 1998; DuFour & Stiggins, 2009; DuFour et al., 2006; Hall & Hord, 2001; Hord, 1997; Wenger, 1998). Professional learning communities connect and engage teachers in face-to-face collaboration with a shared vision for practice and improvement, engaging in reflective conversations with the purpose of affecting professional practice and improving student achievement (DuFour, 2004; Hord, 1997; McLaughlin & Talbert, 2001; Wenger, 1998).

Learning teams can offer strong opportunities for reform at the high school level, and teachers who participate in learning teams often find the support that they need in order to deal with the risks and challenges that professional development can generate, especially when traditional practices are challenged and transformed (McLaughlin & Talbert, 2006). Our AfL learning teams, with their purpose grounded in the understanding, developing, and sustaining formative assessment principles and practices, are the foundation of our professional development program that this study aims to evaluate (DuFour & Stiggins, 2009). Through the perceptions of secondary teachers with regard to how they understand, use, and value formative assessment, it is my hope that my district will be able to use this program evaluation to determine the effectiveness of our district's professional development program and decide where we need to go from here.

Our district is very proud that we have been able to make this shift through a "grass-roots" effort to make these changes without a "top-down" policy regarding

assessment (Elmore, 2007; Fullan, 2001, 2002). Each member of our Learning Team voluntarily attends the meetings, presents and shares information, and has made some seriously untraditional changes to their view of assessment, all because it is what is best for student learning and achievement. Some of these changes include giving students descriptive feedback instead of grades, allowing retakes on assessments once deemed summative in nature, and encouraging students to self-assess their own progress towards learning objectives. Our district has not implemented any sort of assessment "policy", but rather has allowed, though this professional development program on AfL, for teachers to develop, craft, and adopt their own vision and version of AfL, and what it looks like in their classrooms, based on the needs and characteristics of their students, as well as their own discipline and teaching style. By allowing our teachers to make these decisions for themselves, we feel we have really gained a lot of buy-in since teachers have chosen to make the mental model shift from a behaviorist and differentiationist view of learning and assessment to a more cognitive and situative view for the right reasons; and coincidentally, these same learning theories are also at the heart of the new CCSS and PARCC assessments with an greater emphasis on selfdiscovery and inquiry-based learning (Elmore, 2007; Fullan, 2001, 2002; Greeno et al., 1996).

Statement of the Problem

As a member of the original team that started this grassroots movement in our district, I found myself growing increasingly interested in how we can continue to support our AfL efforts and also demonstrate what we had accomplished by evaluating

our professional development efforts towards Assessment Literacy in our district.

Therefore, program evaluation is the most appropriate approach for this study because I intend to analyze how well our professional development program has worked in our district to move teachers from an Assessment *of* Learning view of assessment to a more Assessment *for* Learning perspective (Butin, 2010; Stiggins, 2005). A program evaluation approach provides two key outcomes of interest to me and my district: (a) I want to know how the AfL initiatives have affected the first pilot group of Learning Team members who have developed a strong practice, and (b) I want to consider how to move the AfL agenda forward in our district.

Therefore, the research questions in this program evaluation are focused on some of the original members of our AfL Learning Teams, focusing on their understanding of AfL, as well as how they have come to use and value formative assessment strategies in their teaching (Butin, 2010). These types of research questions and the responses that they elicit will help me, and my district, understand how well this program has worked to achieve our goals, and then decide what the next steps should be to further our district in increasing our understanding, use, and value of AfL.

Patton (1987) suggests that the ultimate purpose and challenge of any program evaluation is to "get the best possible information to the people who need it—and then getting those people to actually use the information in decision-making," which is exactly what this evaluation aims to achieve for our district (p. 9). Of course, the final and most important and impactful reason for this program evaluation is to understand what works and what does not in encouraging teachers to make the shift from an

Assessment of Learning perspective of learning and assessment, to an Assessment *for* Learning perspective, that will ultimately improve student learning (Black & Wiliam, 1998; Popham, 2006; Stiggins, 2005).

Purpose of the Evaluation

The purpose of this study was to evaluate our professional development program by determining how teachers have come to understand, use, and value formative assessment through their participation in our AfL teams for the past five years. This program evaluation assessed teachers' perceptions of AfL after the implementation of this grassroots professional development program that was designed to encourage teachers to use formative assessment strategies in order to improve student learning and achievement. In order to determine how teachers have come to understand and use formative assessment strategies through this AfL professional development program, I used Tierney and Charland's (2007) five part definitional framework of formative assessment, defining it as:

- clearly communicated learning goals and evaluative criteria;
- varied approaches to elicit information about learning;
- feedback in varied forms;
- the adjustment of teaching and learning as a result of assessment; and
- the active involvement of the students" (p. 5).

This list is derived from the original meta-analysis of formative assessment practices by Black and Wiliam (1998) who define formative assessment as:

All those activities...that involve teachers making adjustments to teaching and learning in response to assessment evidence, students receiving feedback about

their learning with advice on what they can do to improve, and students' participation in the process through self-assessment." (p. 140).

According to Stiggins et al., (2006), formative assessment

happens while learning is still underway, conducted throughout teaching and learning to diagnose student needs, plan the next steps in instruction, and provide students with feedback they can use to improve the quality of their work, and help students see and feel in control of their journey to success...it is about getting better (p.31).

In this way, AfL becomes a system of formative assessment practices that teachers choose in order to engage students in their own learning and progress towards learning objectives.

These practices are generally grounded in cognitive or situative theories, requiring teachers to depart from their traditional, summative, behaviorist or differentiationist practices to adopt these formative, student-centered practices. This paradigm shift requires professional development to entice teachers into making this monumental educational change, and the purpose of this evaluation is to determine if our professional development program consisting of AfL Learning teams has successfully inspired teachers into making this mental model shift, and implement the formative assessment practices that it cultivates.

Also worth noting, a similar shift from a behaviorist and/or differentiationist view of learning and assessment to more cognitive and/or situative theory is the national movement to the criterion-referenced Common Core State Standards and eventually, the PARCC testing in Illinois. These educational changes will also drive the assessment trends away from the norm-referenced assessments to criterion-referenced

and is yet another solid case for the local and classroom based shift to Assessment *for* Learning.

Evaluation Questions

This program evaluation our district's AfL professional development program determined if, and how, teachers have changed their mental models of assessment from the Behaviorist-Differentiationist model to the Cognitive-Situative model, or from an Assessment *of* Learning view of assessment, to an Assessment *for* Learning perspective. In order to determine if teachers have gained the conceptual and practical tools from the professional development program to make this shift, and in order to determine if teachers " get (or understand) it, use it and/or like (value) it" with regard to formative assessment, research questions include:

- 1. After participating in the professional development program, how do these teachers understand Assessment *for* Learning?
- 2. How do these teachers use Assessment for Learning?
- 3. What value do teachers place on Assessment for Learning?

Definitions

These are some of the key areas and ideas that I explored in this program evaluation:

Assessment for learning: the process or system of using student-involved formative assessment practices and procedures that result in providing information, to both teacher and student, to advance, not merely check, student learning (Stiggins, 2005) **Behaviorist-Differentiationist Learning Theories:** a combination of two compatible learning theories developed from early 20th century behaviorist theories and the work of test developers that seek strict measurements of behaviors and postulate no underlying processes of cognition or social learning. Behaviorism and differentiationism share a preference norm-referenced understanding of knowing and learning, with assessments measuring how much knowledge or skill was acquired, made by authoritative judgments by subject matter experts (Greeno et al., 1996).

Cognitive-Situative Learning Theories: a combination of two compatible learning theories where assessment involves students in their own learning through focused self-assessment and reflection, classroom activities that involve problem-solving, reasoning, and discussion in order embrace differences in students, enhance their learning experiences, and prepare them for life beyond high school by assisting them to take their learning into their own hands (Greeno et al., 1996)

Feedback: an evaluative response, usually non-graded, to the student as a result of a process or activity that explains and scaffolds learning focusing the student on improvement and the next steps in learning (Black & Wiliam, 1998a; Popham, 2005)

Formative assessment: a composite practice involving: (a) clearly communicated learning goals and evaluation criteria; (b) varied approaches to elicit information about learning; (c) balanced and descriptive feedback in varied forms; (d) the

adjustment of teaching and learning as a result of the assessment; and (e) the active involvement of students (Black & Wiliam, 1998; Popham, 2005; Stiggins, 2005; Tierney & Charland, 2007)

Professional development: formal learning opportunities provided to educators to improve their knowledge, skill, and classroom practices, the best of which engage teachers in collaborative activities related to curriculum, instruction, and assessment (McLaughlin & Talbert, 2006; DuFour et al., 2006; Chappuis et., 2009) **Summative assessment:** the assessment of the learning and summary of the development of the learners at a particular time; summative assessments suggest that the learning has come to a reportable end, as opposed to formative assessments where the learning is still in progress (Stiggins, 2002).

Theoretical Perspective

Our district's AfL professional development program has been guided by theory that has been empirically verified by researchers like Black and Wiliam (1998) which is substantially grounded in current cognitive and learning theories with implications for assessment practices, namely formative assessment practices, that promise improved student outcomes, especially in struggling learners. Greeno et al., (1996) in their study of cognition and learning clearly provide the theoretical framework for both summative and formative assessment practices, as well as other teaching and learning behaviors as well. Summative assessments, including standardized tests that students are subjected to year after year, are grounded in tradition and behaviorist theories (Greeno et al., 1996). When those summative or standardized tests are then used to rank and sort students, then those assessments are considered differentiationist (Greeno et al., 1996). These types of summative assessments are considered Assessment *of* Learning since they are often given to students at the end of the learning in order for students to demonstrate how much they have learned (Stiggins, 2005).

In contrast, the concept of Assessment *for* Learning is grounded in cognitive and situative theories (Greeno et al., 1996). Assessment *for* Learning provides students with assessment opportunities during the learning process in order for them to know how well they are progressing towards specific learning targets or objectives, and to be active in their own self-assessment and goal-setting (Black & Wiliam, 1998; Popham, 2006; Stiggins, 2005).

This program evaluation aims to determine the effectiveness that our professional development program had on initiating the shift in theory and practice in the teachers in our Learning Teams from that of a behaviorist and differentiationist model where Assessment of Learning exists, to that of a cognitive-situative mental model where Assessment *for* Learning exists.

My interest in this evaluation stems from my position in my school district as a curriculum, instruction, assessment, and staff development leader. I have been part of the leadership team that has researched, developed, and implemented this staff development program on AfL for the past six years.

Therefore, I am inherently interested in how this program has been received by our teachers in terms of how much they have come to understand, use, and value AfL in their teaching. I also want to use this evaluation to help determine what decisions need

to be made in the future as to how to further develop AfL in our district with the ultimate result being improved student achievement.

Assumptions

During this study, certain assumptions were made in order prove the strength of this evaluation and make it useful for practice. Many assumptions were made about how my research subjects' responses, about the tools I used to analyze data, and about the validity of our individual questions and how these questions would be understood by our subjects (Bryant, 2004). First, it was assumed that all participants belonged to the formative assessment professional development program in our district, were therefore knowledgeable about formative assessment, and have some experience with it in the classroom. It was also assumed that the participants respond in a truthful manner. Finally, it was assumed that the researcher made every effort to create an authentic and trustworthy evaluation in order to produce useful results, taking pains to eliminate bias, a challenge discussed in Chapter 3.

Limitations

According to Bryant (2004), limitations are those restrictions created by the methodology. This study had several potential restrictions. First, the data was gathered from secondary educators who participated in professional development on the subject of formative assessment from the same large 9-12 school district. The participants have been on different formative assessment learning teams at each of the different district high schools, and the data represent the perceptions of those participants in the 2012-2013 school year. Using more participants from outside the learning teams, schools or

school districts, and grade levels would add further evidence, and therefore increase the trustworthiness of the study.

Also, as the researcher of this study, I am presently in a position of authority in relation to the participants, as an administrator in the district employing the participants. Although at the time I was not an administrator in the building of the participants, participant compliance and responses in the interview may be unintentionally affected and biased as a result of our professional relationships. A final limitation of this study was that of possible researcher bias. As a proponent of Assessment *for* Learning, I have preconceived notions of what I hoped the teachers might say. Therefore, my bias favoring Assessment *for* Learning potentially influenced the interpretations of the data.

Significance of the Evaluation

The results of this program evaluation has implications for practice and positive educational change that will provide administrators and teachers the tools to move from the behaviorist-differentiationist perspective of learning and assessment to the cognitive-situative perspective through the implementation of formative assessment in their teaching. The professional development that has taken place for the last six years is unique in that it has been a grassroots effort to learn and use formative assessment practices in our classrooms through a learning team model of professional development. This is an era when leaders are looking for efficient and effective ways to move teachers from a behaviorist frame of mind over to a cognitive-situative frame, with hopes of using formative assessment to improve student achievement. Also,

because high schools are particularly difficult to move and change from tradition, this program evaluation aims to discover what has happened in our district as a result of the work we have done with the professional development program, focused on the learning team approach. Finally, since our district had no intention or plan to evaluate this formative assessment professional development program, this evaluation is retroactive in nature, especially since program evaluation is most beneficial when planned at the inception of an initiative (Chen, 2005).

Formative assessment is a topic of significance in education and has evolved over years. While studies have focused on the nature of formative assessment and the connection to student achievement, the topic continues to be of importance today. Tierney and Charland (2007) in their synthesis of studies of formative assessment in secondary classrooms suggest that formative assessment is a complicated subject and much empirical research is still needed (p. 53). Therefore, the results of this program evaluation will benefit students, teachers, and parents in the school community. It provided teachers with a forum to share their opinions, understandings, and uses of formative assessment. This program evaluation may even advance positive social change by encouraging other teachers, administrators and school board members to reflect on assessment, giving further thought towards the movement from a behaviorist view of assessment and the sorting that result from it to a more cognitive-situative one that supports learning for all students. In the words of Donaldson (2006), "Learning must generate action in the form of new practices" for both students and teachers,

including the teachers' social learning in professional development and in their own selfformed groups and relationships brought about by the learning team concept (p. 163).

The significance of this program evaluation is first in the exploration of how the teachers in the Assessment *for* Learning teams have come to understand, use, and value formative assessment as a result of their participation in the professional development aimed at causing a mental shift from a behaviorist view to that of a cognitive-situative view of assessment (Greeno et al., 1996). In this way, this program evaluation is also important in determining if and how teachers understand the concept of AfL, and if they actually value it enough to practice it in their classrooms. This evaluation also intends to further the understanding of the process of change in secondary schools, especially from a leadership perspective, and understand if the learning team approach to professional development can promote and cause lasting change.

Summary

This study seeks to evaluate the AfL professional development program at Lincoln-Way District 210 aimed at shifting the educators from a behavioristdifferentiationist perspectives of learning to a cognitive-situative views. This program evaluation is to be accomplished by exploring the perceptions of secondary teachers on their understanding and use of formative assessment. A body of research supports that AfL increases student learning and achievement (Black & Wiliam, 1998b). Therefore, this study aims to show that using a grassroots style professional development program using learning teams and other professional development opportunities provided teachers in our district the tools to shift their view of education from a traditional

behaviorist/differentiationist perspective to a cognitive-situative view where formative assessment practices drive the learning environment in their classrooms. From this study, it is my hope that the formative assessment professional development program in our district, featuring Learning Teams, will have motivated and inspired teachers to have successfully made this transition in educational theory, and not only come to understand formative assessment, but also value it enough to use it effectively in their classrooms as well with the ultimate goal of improving student learning, especially in the lowest of achieving students.

CHAPTER II

SCHOLARSHIP ON ASSESSMENT FOR LEARNING

In order to evaluate the Assessment *for* Learning (AfL) professional development program in Lincoln-Way District 210, it is imperative to understand and explore the literature and research related to: (a) the historical perspective of assessment and assessment policy; (b) the nature of AfL itself including the formative assessment strategies necessary for effective implementation; (c) the relationship between AfL and student achievement, (d) the professional development and leadership that is required to build AfL capacity; (e) the present research related to the evaluation of professional development programs on AfL; and (f) an overview of our District 210 Professional Development Program.

Historical Framework of Formative Assessment and Policy

Although many theorists and researchers may lay claim to the development of AfL theory and the strategies and principles associated with formative assessment, the most significant landmark in the emergence of formative assessment was a synthesis of research findings conducted by Paul Black and Dylan Wiliam in 1998. Their meta-analysis of literature on classroom formative assessment titled *Inside the Black Box* is considered seminal research on formative assessment, consists of hundreds of studies, and is the compelling reason why professional development on the topic of AfL exists in schools today. Black and Wiliam's (1998) meta-analysis studied strategies used by teachers to assess student progress during instruction, and the perceptions of students and their role in self-assessment, proving that nothing is more effective on student learning than formative assessment, most significantly on struggling learners.

From their review, Black and Wiliam (1998) proposed that effective assessment involves: (a) teachers making adjustments to teaching and learning in response to assessment results; (b) students receiving feedback about their learning with advice on what they can do to improve; and (c) student participation in the assessment process through self-assessment. Black and Wiliam (1998) concluded that formative assessment strategies triggered some of the largest gains in student outcomes ever reported, with the largest gains being realized by low achievers. In fact, the gains in student achievement with the use of formative assessment strategies are so considerable that Black and Wiliam (1998) reported them to be "amongst the largest ever reported for educational interventions" (p. 61). This empirical evidence and unprecedented gains in student achievement make an undeniable case for why professional development must exist in districts on the topic of formative assessment, especially when pressure exists through national assessment policy that all students are reaching higher, common standards.

American education has been challenged with assessment policy for decades, and through a look at federal and state initiatives, districts and schools can often recognize and address what types of school improvement efforts are needed at the local level. Educators working in American high schools are time and again challenged to

abide by, improve, and create local educational policy that will improve student achievement for all students (Chappuis, 2007; Darling-Hammond, 2010). Since empirical evidence exists to prove that local, formative classroom assessment has the power to improve student outcomes, especially in low achieving learners, educational leaders must now begin to move educators towards a formative view of education where Assessment is used *for* Learning, and all students are expected to and can succeed (Black & Wiliam, 1998; Guisbond, Neill, Schaeffer, 2011; Popham, 2008; Shepard, 2008; Stiggins, 2005a; Stiggins & Chappuis, 2005).

Attempts to motivate schools and districts through policy by holding them accountable for scores on standardized tests designed to rank and sort students, and intensifying the stakes associated with low test scores, has gone on for decades; however, not only is there little evidence that these tests have improved school quality or reduced achievement score gaps. Some believe they have worsened the problem with increases in dropout rates and declines in graduation rates, especially in minorities, since feedback delivered once a year from standardized assessments, mandated by NCLB, is far too infrequent to be helpful (Darling-Hammond, 1995; Kohn, 2000; Stiggins & Chappuis, 2005).

When No Child Left Behind (NCLB) began to hold school districts accountable for the achievement of all students in 2002, each state was then required to develop rigorous learning standards and curriculum frameworks, conduct annual assessments at specific grade levels, implement a comprehensive accountability system, direct formal sanctions against Title 1 districts, and establish new qualification requirements for

teachers and paraprofessionals beyond standards established my many states (NCLB, 2002). Thus began the race for all school districts across the country to rethink teaching, learning, and assessment practices in fear of not making Adequate Yearly Progress (AYP). President Obama then challenged states to win this "Race to the Top" with states competing for a grant earned by setting and enforcing those state-created standards and assessments. With this challenge, the Race to the Top (RTTT) program funded the development of a new national assessment system that would measure student skills against a common set of college- and career- ready standards in mathematics and English language arts, resulting in the development of the Common Core State Standards (CCSS). Common Core State Standards are an attempt for education to shift from a summative view of learning grounded in behaviorist-differentiationist theories of learning and assessment to that more formative or cognitive-situative views, actively engaging students in their learning and educational success.

In response to the Common Core Standards, the Partnership for Assessment of Readiness for College and Careers (PARCC) received a grant through RTTT to develop a common set of PK12 assessments with the purpose of creating an assessment path to college and career readiness by the end of high school, track students' progress toward this goal from 3rd grade on, and provide teachers with timely information to guide instruction and provide student support to reach those college and career readiness goals (Achieve, 2012).

Even though it is clear that standardized testing still exists in education accountability, it is now known that what happens at the local, classroom level is what truly makes a difference in student learning and achievement (Black & William, 1998, 2011; Danielson, 2007; Popham 2008). Danielson has very explicitly placed AfL in her model of effective teaching, now widely used throughout the United States for teacher evaluation (2007). Danielson's placement of AfL within her frameworks of effective teaching is consistent with leading assessment thinkers in the field such as Black and Wiliam (1998), and are a widely accepted set of practices to measure teacher effectiveness (2007). According to her model, only teachers who embrace and implement AfL strategies and concepts within their teaching will be considered at least proficient in their profession (Danielson, 2007).

Educators who implement AfL their teaching are taking steps to make the shift from a summative or behaviorist-differentiationist view of assessment where standardized testing exists, to a more cognitive-situative view where formative assessment is a foundation for students to know, understand, and do more, particularly struggling learners (Black & Wiliam, 1998; Danielson, 2007; Popham, 2008). Therefore, because formative assessment practices are directly linked to improved student achievement and are instrumental in what is now considered effective teaching, educators and administrators must improve their understanding and use of AfL (Black & Wiliam, 1998a; Brookhart, 1997, 2004, 2007; Chappuis, 2006; Danielson, 2007; Guskey, 2010; McMillan, 2007; OECD, 2005; Popham, 2008; Shepard, 2005; Stiggins, 2005).

Further, educational leaders must find ways to develop teachers professionally in the ways of formative assessment in order to make this mental model shift occur (DuFour & Stiggins, 2009; Popham, 2005). By encouraging the shift to the cognitivesituative formative assessment model of learning, teaching, and assessing through effective professional development, teachers can come to believe that all students can and should achieve academic success and bring students to believe this of themselves (Black & Wiliam, 1998b; Guskey, 2007; Reeves, 2007; Stiggins, 2006). Wiliam (2007) clearly states that "changing teacher's minute-to-minute and day-by-day formative assessment practices is the most powerful way to increase student achievement," and so the need for the professional development in this area is clear (p. 200-201).

The historical framework of formative assessment has direct implications for schools or districts seeking to encourage the shift from a behaviorist-differentiationist view of education to more of a cognitive-situative view through an AfL professional development program. If school systems, like ours, are serious about raising student achievement for all students, teachers must change what they are doing in the classroom, and these changes stems from effective professional development. Research on school (Darling-Hammond, 2010; Elmore, 2007; Fullan, 2002; Marzano, 2003) and assessment reform (Chappuis, 2004; Stiggins, 2002) suggest to explicitly communicate a clear, consistent message about effective assessment practices as part of a local district's education goals.

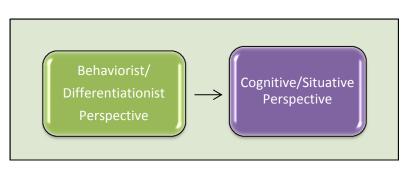
Therefore, in order improve student achievement, high schools like ours must provide communicate this message of improved assessment literacy through

professional development with regard to the principles and strategies specific to formative assessment, and the positive results that come from teachers implementing these practices in their classrooms on a daily basis.

Theoretical Framework

Merriam defines theoretical framework as "the underlying structure, the scaffolding or frame of your study" and then goes on to state that "a theoretical framework indicates to the reader the topic you are interested in" (Merriam, 2009). The theoretical framework therefore is "derived from the orientation or stance that you bring to your study, and every study has one" (Merriam, 2009). In order to study formative assessment, it is necessary to consider how and when learning occurs, particularly in relation to assessment.

Figure 1.0. Theoretical Framework



Assessment *for* Learning Professional Development

Behaviorist-Differentiationist Theories

The traditional behaviorist perspective supports a view of "knowing and learning, in which assessment involves independent samples of knowledge or skill to estimate how much a student has learned," emphasizing student behaviors that can be counted or "measured" (Greeno et al., 1996). The behaviorist perspective sees learning as an organized collection of knowledge and associations where the learner responds to questions, much like a computer, in order to reinforce desired responses. Students win or lose, depending on their responses, causing lasting pleasure or humiliation, ultimately guiding the future learning experience of the student. The behaviorist view depends on extrinsic motivations with a system of rewards and punishments, requiring positive and negative incentives in order for learning to occur. In the younger grades, these incentives can include gold stars, smiles and/or positive comments from the teacher. At the secondary level, these incentives are grounded in grades, extra credit, grade point averages, and class rank.

Assessments in the behaviorist-differentiationist model are designed to check for the acquisition of knowledge, usually through short answer, simple-problem tasks, or other small units of behavior. The behaviorist classroom is designed to transmit information efficiently, usually with the teacher at the front of the classroom in a lecture and listen model of teaching with little or no interaction with the student. Homework is checked and recorded, and rewards in the form of grades are given for correct answers. The behaviorist classroom demands the recitation and memorization of definitions and

formulas, usually through the use of a workbook for drill and practice (Greeno et al., 1996).

Through the behaviorist view is the creation of standardized achievement assessments in many schools, states, nations and international studies. Although it is through the behaviorist lens that standardized tests are created to test knowledge and achievement for school subjects, it is through the differentiationist lens that these assessments are most often designed to compare students with each other in a process of norm referencing, rather than criterion referencing (Greeno et al., 1996). The behaviorist and differentiationist models have a strictly quantitative view of knowing and learning, counting seemingly discrete behaviors, with assessments necessary to estimate how much knowledge or skill was acquired, made by authoritative judgments by subject matter experts.

However, with the adoption of Common Core State Standards and a renewed vision of assessment by the PARCC and SARB groups, no longer will the behaviorist nor differentiationist lens be effective for educators to look through if they want all students to learn and achieve, and it is this lens that our professional development program aimed to work against and unseat in teacher practice. Education must make the shift from a behaviorist and/or differentiationist view of learning and assessment to a cognitive-situative view (Greeno et al., 1996).

Cognitive-Situative Theories

Shepard (2009) asserts that the behaviorist and differentiationist views in this new era of education have been contrasted with a new understanding that learning

occurs most effectively through social interactions and student cognitions. The cognitive perspective suggests focusing on teaching as a kind of coaching, emphasizing teachers' understanding of and attention to students' thinking in order to identify potential improvement that they can guide and encourage. In this way, the teacher takes the role of a learning coach, paying close attention to student thinking and creating experiences to guide and encourage learning. Both the cognitive and situative models rely on students participating in these experiences and become active in their learning, becoming fully engaged through the experiences of reasoning, problem-solving, evaluating, discussion, and argumentation. Although Greeno et al. (1996) distinguish between the cognitive and situative models, the two will be collapsed and combined into one concept for the purposes of this evaluation, especially since both the cognitive and situative perspective suggests a focus on teachers as mentors, engaging students in activities, and using subject matter expertise to guide students to become increasingly competent learners (Greeno et al., 1996).

In the cognitive and situative view, the activities of constructing understanding have two main aspects: interactions with material and concepts that a student must come to understand, and social interactions in which learners discuss or demonstrate their understanding of those concepts. The cognitive-situative view of learning depends on students being engaged in these social interactions where they are expected to participate in higher level forms of inquiry, like deductive reasoning and the scientific model. In this way, school becomes a series of interactive communities of learners, designed by the teacher as a mentor or coach, to create and enhance student interest

and construct understanding through the problem-solving and reasoning through realistic problems, preparing them for life after school. In the cognitive-situative model, learners must be given opportunities for participation in the practices that they are expected to learn, allowing for these practice activities in which their knowledge and skills become stronger through participation (Greeno et al., 1996).

In the cognitive-situative view, students should participate meaningfully in the process of assessment, with the understanding that assessment is an extended performance, emphasizing what students know and understand in accomplishing larger tasks (Greeno et al., 1996). In order for teaching and learning to support a cognitivesituative model, classroom assessment must change in the way in which it is implemented by educators. According to Shepard (2009), to be compatible with and to support this cognitive-situative model of teaching and learning, "classroom assessment must change in two fundamentally important ways. First, its form and content must be changed to better represent important thinking and problem solving skills in each of the disciplines. Second, the way that assessment is used in the classrooms and how it is regarded by teachers and students must change" (Shepard, 2009). When determining what students know and can do, a cognitive-situative model of assessment "engages students to test what they know with their peers, during the process of self-evaluation, and through a variety of modalities" (Brooks & Brooks, 1993). Knowing that students learn in diverse ways means providing students with opportunities to demonstrate their knowledge in different and authentic ways (Shepard, 2000).

Assessment then becomes a matter of the teacher determining how much understanding each student now has, and how the student demonstrating that understanding to problem-solve in real world situations. Assessment is also done in this cognitive-situative model by assessing the quality of participation in the social interactions of inquiry, discussion, and problem-solving, allowing for students to demonstrate how they can use their new understanding to reason and accomplish larger tasks. An understanding how learning happens in this manner, within a constructivist frame, acknowledges that learning is not passive. When teachers and students engaged together in responding to evidence about learning, including feedback, self-monitoring, and self-regulation on the part of the students, the teachers and students assume the roles of partners in the assessment process. This partnership, as well as the assessment practices of feedback and self-assessment by the students and the teacher are the primary functions, and sit right at the heart, of formative assessment.

Formative Assessment

Our professional development on formative assessment aims to shift teachers' thinking and practices in the classroom from a behaviorist-differentiationist model to that of a cognitive-situative model through the understanding and use of formative assessment principles and strategies. With this mental model shift, it is our hope that student learning, engagement, and motivation all increase through the consistent use of the principles of formative assessment, ultimately improving student achievement (Black & Wiliam, 1998; Popham, 2008). In the professional development program in our

district, a variety of formative assessment strategies were presented and discussed, as defined by Tierney and Charland's (2007) definition of formative assessment as a "composite practice involving:

- Clearly communicated learning goals and evaluative criteria
- Varied approaches to elicit information about learning
- Feedback in varied forms
- The adjustment of teaching and learning as a result of assessment, and
- The active involvement of the students" (p. 5).

In the next several sections, I will explain and provide an overview of how each of these strategies is an integral part of Assessment *for* Learning theory.

Formative Assessment Strategies

In Brookhart's (2009) reflection on current views and practices of formative assessment, she stated that "there is too much emphasis on 'assessment' (tests and assessment, schedules and data reports) and not enough on formation (learning)" (p. 1), clearly explaining the need for the shift from a summative to a formative view of assessment. Through the evaluation of the professional development for formative assessment of the strategies discussed below, a shift in practice can be realized (Brookhart, 2009; Tierney & Charland, 2007).

Learning goals/explicit criteria. Among the first principles addressed through our professional development program on formative assessment are the effective uses of clearly articulated learning purposes, goals, or targets (Stiggins & Chappuis, 2005; Tierney & Charland, 2007). The use and articulation of clear, concise learning targets expected to be mastered, specifically rewritten into student-friendly language from large scale standards, is the first step in improving student achievement overall (Stiggins, 2007; Stiggins & Popham, 2008). According to Stiggins et al. (2006), clear learning targets are essential for sound assessment, as teachers cannot assess, and students cannot learn, what is not clearly articulated to students. With AfL, students must take learning in to their own hands, and the first step in accomplishing this is through the clear communication of the learning goals to the students.

Teachers who initially organize their instruction and assessment based on specific learning outcomes are better prepared to communicate those expectations to students (Stiggins, 2005). Students need to know what the intended learning goal is, be allowed to judge and monitor their own progress towards those goals, and effectively engage them in thinking about themselves as learners, not just point-earners. These student-engaging strategies ultimately allows the shift from a behaviorist theory-driven classroom to a more cognitive theory-based one instead (Black & Wiliam, 1998b; Greeno, et al, 1996; McTighe & Wiggins, 2005).

Accompanying the achievement targets should be samples of work that clearly reveals to students what their work will look like as it improves towards the learning targets (Stiggins & Popham, 2008). In order for students to be successful, students must have a clear understanding of what successful learning should look like. Frederiksen and Collins (1989) used the term *transparency* to express the idea that students must have a clear understanding of the criteria by which their work will be assessed. In fact, the

features of excellent performance should be so transparent that students can learn to evaluate their own work in the same way that their teachers would (Fredriksen & Collins, 1989). Actual samples of student work that illustrate the different levels of achievement is one way that gives students a reference point from which to track their own learning and performance (Popham, 2008; Stiggins et al., 2006). Providing students with explicit criteria in the form of examples and models of strong and weak work strengthens students' evaluative thinking by letting them practice making judgments about accuracy or level of quality with carefully chosen assessment items and examples (Stiggins et al., 2006). Helping students to learn more and to inform students themselves about how to maximize their success will yield significant school improvement and reduce achievement gaps (Stiggins & Chappuis, 2005).

Approaches to elicit learning information. Another strategy and principle of AfL that our professional development program focuses on are the different approaches to elicit learning information from students (Tierney & Charland, 2007). Traditional secondary level assessment practices grounded in behaviorist-differentiationist theories that encourage rote and superficial learning on the part of the students, often serving the managerial requirements of teachers to keep track of students' grades and maintain grade books (Black & William, 1998a; Black et al., 2004; Shepard, 2000; Stiggins, 2002). Traditional grades and grading systems have long supported a differentiationist theory based system intended to sort and classify students (Guskey, 2007; O'Connor, 2002, 2007; Reeves, 2007). Unfortunately, this type of grading can undermine the goals of formative assessment by confusing the goal of the learning task (Burns, 2009; Guskey

2007; Reeves, 2007). While student learning can be significantly advanced by other approaches to elicit information about student learning such as descriptive feedback, the giving of numerical scores or grades has a negative effect, in that students often disregard comments when grades are also given (Black et al., 2004; Guskey, 2007; Reeves, 2007).

Through formative assessment strategies designed to elicit information about learning and provide an accurate description of how well students have learned, teachers can gauge how well a student is progressing towards the learning targets (Black & Wiliam, 1998; Popham, 2008; Stiggins et al., 2006). One such strategy to elicit information about student learning is non-graded assessments where students are given opportunities to receive feedback from the teacher without a grade associated with it, and self-assess their own progress towards learning targets (Popham, 2005; Stiggins, 2002, 2005a, 2005b). In this manner, the assessment becomes purely formative, as opposed to summative, in that its purpose is to communicate to both the teacher and student how well the student is progressing towards mastery (Reeves, 2001, 2007; Shepard, 2000; Stiggins, 2006). These assessments, often time in the form of "Bellringers" when they occur at the beginning of the class period, or "Exit Slips" when they happen at the end, give students an opportunity to communicate with their teacher about their progress in a non-threatening, positive manner (Stiggins, 2006). By evaluating the learning information provided on these assessments, teachers are able to make instructional decisions, gauging their students' learning (Reeves, 2007; Shepard, 2000; Stiggins, 2006).

When students are provided non-graded opportunities to demonstrate their learning, and teachers use a variety of approaches to elicit information about student learning, the focus of the class becomes the mastery of skills and knowledge, not about how many points are in the grade book, providing an even further shift from a behaviorist/differentiationist view of assessment and learning over to a cognitivesituative view instead (Greeno et al., 1996; Stiggins et al., 2006).

Feedback. Perhaps the most significant principle of our AfL professional development program, feedback was initially described by Bloom (1968) as the information about the "gap between current and desired performance" (p. 2). Feedback focuses on specific outcomes and what the learner needs to do to improve (Davies, 2000). Providing students with continuous descriptive feedback shows them how to do better the next time with a frame of reference from which to track their own progress (Stiggins, 2007). This process brings students to a place where they become partners with their teachers for what comes next in the learning, therefore building a strong sense of academic self-efficacy (Stiggins, 2007).

Feedback provided in formative assessment is considered "descriptive" when it is not in the form of a score or a grade; rather, the purpose of feedback is to improve learning while that learning is occurring or evolving (Heritage, 2010). To support learning while it its occurring, teachers must provide descriptive feedback in the form of ideas, strategies, and tasks the student can use to close the "gap" between his or her current learning level and the next level (Popham, 2008; Stiggins et al., 2006). By giving students this type of descriptive feedback, students gain control of their learning in the

form of the information needed to keep them making progress towards the pursued achievement target (Stiggins & Popham, 2008).

However, the mere presence of feedback does not improve learning; instead, it is the quality that determines its effectiveness (Chappuis, 2009). As Shepard (2008) summarizes, effective feedback directs attention to the intended learning, pointing out strengths and offering specific information to guide improvement; it occurs during the learning, while there is still time to act on it; it addresses partial understanding while allowing the student to do the thinking; and it limits corrective information to the amount of advice the student can act on. In general, when feedback is communicated often and through a variety of formative assessment strategies, there appears to be a positive improvement of achievement (Black & Wiliam, 1998; Chappuis, 2009; Popham, 2008).

Both Black and Wiliam (1998b) and Marzano (2009) report on studies that show a percentile gain averages from 13.5 points of improvement by assessing one time, to 29 points of improvement by assessment 30 times, within a fifteen week period (Burns, 2009). In another study, Shute (2008) examined the research on feedback to students, endorsing the findings of earlier reviews on the size of the effects that could be expected from feedback: standardized effect sizes ranging from 0.4 to 0.8 standard deviations. Shute (2008) also suggested that feedback should focus on the specific features of the task, provide suggestions on how to improve, and be presented in manageable pieces as immediately as possible.

Effective feedback also informs students about their work that they might not have noticed themselves, but that they understand how it fits with what they are trying to learn and accomplish (Brookhart, 2011). According to Brookhart (2011), effective feedback is timely, focuses on one or more strengths and at least one suggestion for the next step, focuses on the student's work and not the work process, is descriptive, not judgmental, and is positive, clear, and specific. Feedback strategies are numerous and can vary in their timing, amount, mode, and audience (Brookhart, 2008). General principles for feedback should be adjusted depending on the learner's needs. Feedback to the struggling student should include focusing on the process, selecting only one or just a few points, giving self-referenced feedback to describe progress or capability, being very clear, and checking for understanding (Brookhart, 2011).

As students inform teachers what they know and can do towards learning learning targets and standards, teachers use that feedback from students as formative assessment when it affects their instruction (Burns, 2009). Brookhart (2008) states that not all students know how to use feedback productively, but the skill can be taught. When students learn to self- and peer- evaluate, they grow to understand where feedback comes from and develop a greater interest through ownership of the process (Burns, 2009). Frequent feedback can help all students, especially low performers, to believe that they can control their own success in making progress towards the learning targets (Black & Wiliam, 1998; Stiggins & Chappuis, 2005). In this manner, teachers are then able to determine which students are progressing appropriately towards mastery

of learning standards and which students may need more support for their learning in the way of corrective instruction.

Corrective instruction. Another formative assessment strategy that our professional development program focuses on is the use of corrective instruction (Black & Wiliam, 1998; Popham, 2008; Stiggins et al., 2006; Tierney & Charland, 2006). According to Tierney and Charland's (2006) model of formative assessment, the fourth area involves the adjustment of teaching and learning as a result of assessment. Assessments provide essential information for both students and teachers; therefore, it makes sense that they do not, and should not, exist as the end of learning. According to Guskey (2007), assessments must be followed by high-quality corrective instruction designed to help students fill whatever learning gaps were identified with the assessment.

By following assessments with instructional alternatives that present those topics or ideas in new ways, teachers continue the formative learning process (Guskey, 2007). If teachers follow assessments with high-quality corrective instruction, then students will have a second chance to further their learning and then demonstrate their new learning and understanding (Guskey, 2007.) Through the use of corrective instruction, achievement scores rise almost as high as the use of one-on-one tutorial instruction, with the largest gains being realized by the lowest achievers (Stiggins, 2005a).

Another classroom strategy that our professional development program focused on in connection with adjustment and corrective instruction is the opportunity for

students to retake or re-do an assessment (Black & Wiliam, 1998; Black et al., 2003; Guskey, 2003, 2007; Heritage, 2007; Popham, 2008; Stiggins et al., 2006; Wormeli, 2010). Curriculum goals do not require that every student reaches the same level of proficiency on the same day, but only that every student achieves the goal; therefore, allowing student to redo both assignments and assessments for important standards and outcomes most of the time is highly effective (Wormeli, 2011).

Students should be encouraged through peer assessment and self-assessment to re-evaluate their summative assessments to help them understand how their learning might be improved, often including the opportunities to rework test answers in class (Black et al., 2004). When summative tests are used formatively, the message is that summative tests are still an integral part of the learning process, and through active involvement in the testing process, students can see that they actually benefit from testing since tests help them improve their learning (Black et al., 2004). True knowledge comes with iterative learning, as learners carry forward concepts of skills encountered repeatedly, allowing them to get better at retrieving them the more they are experienced (Wormeli, 2011).

Therefore, the aftermath of tests can also be an occasion for formative work. Peer grading of tests can be helpful, as with normal written work, and it is particularly useful if students approach the problems encountered by a small groups of students while the teacher use their time for discussion of the questions that were most difficult for the majority of the students (Black et al., 2004). In a successfully differentiated class,

students should be allowed to redo work and assessments for full credit, ultimately leading to increased equity in the class full of differentiated learners (Wormeli, 2006).

Student involvement. The last principle of formative assessment that, according to Tierney and Charland (2006), that our AfL professional development program focused on involves students becoming increasingly involved in the assessment process (Black & Wiliam, 1998; Black et al., 2004; Popham, 2008; Shepard, 2008; Stiggins et al., 2006). When teachers bring students into the assessment process, this deepens the shift from a behaviorist or differentiationist view of assessment to more of a cognitive or situative view where students are involved and actively engaged in their learning (Greeno et al., 1996; Popham, 2008; Stiggins, 2004; Stiggins et al., 2006).

Therefore, Stiggins (2004) suggests that teachers must deepen their understanding of the relationship between assessment and student success from the student's perspective, and realize that the student's role in formative assessment is to understand what success looks like and then use feedback from each assessment to determine how to do better next time. With formative assessment, students become partners in their own achievement as it is happening. Strategies for students to become partners in the assessment process exist in the strategies of both self- and peerassessment (Shepard, 2008; Stiggins, 2006).

Students self-monitoring their own learning and thinking lie at the heart of cognitive learning theory (Greeno et al., 1996; Shepard, 2000). Students learn by self-assessing before and during learning, connecting new knowledge and skills with what they have already learned and used. When students are involved in the assessment

process, they learn more, achieve at higher levels, are more motivated, and they are also better able to set informed, appropriate learning goals to further their learning (Black & Wiliam, 1998; Black et al., 2004; Davies 2004, 2007; Stiggins, 1996). With selfassessment, students begin to think of their work in terms of a set of goals, allowing them to manage and control the work for themselves (Black et al., 2004). By getting students to play a role in this process, teachers set students up to become partners in figuring out what comes next in their learning, setting goals for themselves, and defining their own success, only adding to the students' sense of control over their own success (Stiggins & Popham, 2008).

When students reflect about their understanding, teachers can use this to inform future teaching, and the feedback can determine the areas a teacher needs to re-teach or revisit (Black et al., 2011). Black et al. (2011) suggest that to improve student selfassessment practices, teachers should make the specific guidelines for on how students will be evaluated or graded completely clear to students, teach students the habits and skills required for self-assessment that they have developed through peer assessment, and encourage students to focus on the goals of their learning, assessing their own progress toward meeting these goals so as to make them more independent learners.

Shepard (2000) summarized research that showed students who practice selfevaluation are more motivated and interested in feedback than students who do not self-evaluate. As students come to understand how their work will be evaluated, they become better able to connect how they do on an assessment with their own efforts in preparing for the assessment (Stiggins, 2005b). However, self-assessment can only

happen if teachers help their students, particularly low-achievers, to develop this skill. Self-assessment strategies such as color labels or rubrics can be used as simplified ways of communicating students' self-judgments (Black et al., 2011).

When teachers know how to encourage the active involvement of students in the process of self-assessment, students are also commonly involved in peerassessment, another tool for learning and improving grounded in situative theory where learning is primarily social in nature (Black et al., 2011; Greeno et al., 1996; Heritage, 2010). Peer assessment is valuable for students because it offers them the opportunity to accept the criticisms of their work from one another that they may not have taken seriously if the remarks had been made by the teacher (Black et al., 2004). In this manner, other student perspectives build the learner's ability to look at their own learning in deeper ways, increasing the depth and understanding of concepts as well as developing the learner's self-reflection and learning process.

To provide peer feedback, Heritage (2010) suggests that students need to assess another peer's learning, or their classmates' learning as a group, against the same success criteria they use to check their own learning. White and Fredriksen (1998) found that the process of coming to understand the criteria by which their work would be judged, as mentioned previously, and learning to apply it to their own and to others' work benefits all students. Peer feedback involves thinking about learning and can deepen students' understanding of their own learning (Black et al., 2011; Heritage, 2007; White & Fredriksen, 1998).

Peer assessment is also valuable because the conversations take place in natural student language, allowing for students to take the role of teacher and examiner of others (Black et al., 2004). Additionally, students providing the feedback benefit just as much as the recipient because they are forced to understand what their peers are expected to learn and what successful learning should look like in their peers (Black et al., 2011; Heritage, 2010; Wiliam, 2007). The learning therefore belongs to the students, requiring teachers and school to really reflect on authentic learning and what it means for the student.

The feedback students provide to each other can also serve as an element of formative assessment for teachers (Black et al., 2011; Heritage, 2010). What students say or write about each other's work can be evidence of how well they understand the learning goals and success criteria, and the depth of their thinking about the task at hand (Heritage, 2010). Peer assessment is also valuable in placing the assessment in the hands of the students, leaving the teacher free to observe and reflect on what is happening to create future, helpful interventions (Black et al., 2004).

Based on their studies of peer assessment, White and Fredriksen (1998) describe two requirements to engage students in peer feedback: an understanding that student performance, and not the student, is being evaluated; and a clear understanding how to do well. Self- and peer assessment provides students with ownership, allowing for profound gains in achievement for everyone, especially struggling students (Dixon, 2008).

Our professional development program, grounded in a grassroots learning team approach, specifically and deliberately models the belief that learning should be a personal, social endeavor. Therefore it is my hope that our professional development program, designed to encourage and support teachers in the use of these formative assessment strategies will not only proved to have shifted the assessment and learning theory model from a traditional, summative, behaviorist-differentiationist view to that of a more engaging, formative, cognitive-situative view, but it will also undoubtedly improve and increase student achievement in all students, certainly the ultimate goal of any professional development program or initiative.

Formative Assessment and Student Achievement

Since Black and Wiliam's (1998b) groundbreaking study, researchers have challenged or simulated their study with different variables, yet always with the same results. Dozens of studies conducted at all levels of instruction offer similar evidence of strong achievement gains in student performance as measured by standardized tests after the implementation of formative assessment practices (Stiggins et al., 2006). When students are involved in the assessment process, they learn more, achieve at higher levels, are more motivated and are better able to set informed, appropriate learning goals to further their learning (Black & Wiliam, 1998; Davies 2004, 2007; Stiggins, 1996).

After examining the literature on assessment worldwide, the effects of formative assessment on summative test score reported unprecedented positive effects on student achievement (Black & Wiliam, 1998, 2003; Black et al., 2003, 2004; Wiliam,

2007; Wiliam et al., 2004). Their study analyzed a variety of formative assessment strategies including clear expectations, choice of task, discourse, questions, frequency of testing, and most significantly, the quality of feedback. When implemented effectively, these strategies yielded remarkable, measurable impact.

Hattie and Timperley's (2007) review of the empirical literature was specifically on feedback. This review of 196 studies provides a conceptual analysis of feedback and reviews the evidence related to its impact on learning and achievement. The evidence shows that although feedback is among the major influences, the type of feedback and the way that it is given can be differentially effective. In a report with nearly 7000 effects, the authors report that feedback had an average effect size of 0.79 standard deviations, an effect greater than student prior cognitive ability, socioeconomic background, and reduced class size (Hattie & Timperley, 2007). This study continued to put formative assessment on the map in terms of effective teaching and learning practices.

Formative assessment has further implications for improving student achievement, particularly in low-achieving students, but it also has also has significant implications for student motivation as well. Student motivation, a critical intervening variable between formative assessment and learning, consists primarily of student engagement or effort, goal orientation, and self-efficacy (Stiggins & Popham, 2009). When students are involved in the assessment process, not only do they learn more, achieve at higher levels, but are also more motivated and are better able to set

informed, appropriate learning goals to further their learning (Black & Wiliam, 1998, 2003; Davies, 2004, 2007; Stiggins, 1996).

The need to motivate students is evident, but it is often assumed that offering such intrinsic rewards as grades, gold stars, and prizes is the best way to do it; however, there is ample evidence to challenge this assumption (Black et al., 2004; Wiliam, 2007). According to Davies (2007), the way teachers assess and evaluate student work impacts students' motivation for learning. Students will invest effort in a task only if they believe that they can achieve something that is meaningful to them; when learning is seen as a competition, students are aware that there will be losers and winners, and those who have a record of losing will see little point in even trying (Black et al., 2011). Thus the problem is to motivate everyone, even though some are bound to achieve more than others, and in addressing this problem, the type of feedback given to students is very important, especially when students know that everyone is allowed to learn (Black et al., 2011).

Educators report and confirm that when students are involved in the assessment process, they develop a sense of ownership and commitment to their learning, make choices about what to focus on next in their learning, engage in learning, and experience fewer discipline problems (Harlen & Deakin-Crick, 2003). If a formative assessment classroom is working appropriately, students' perceptions of their personal academic abilities should remain high, or improve substantially if such perceptions are low (Stiggins & Popham, 2009). Not only will students believe that they are capable of learning, but students' eagerness to learn will remain high or increase over time due to

the fact that formative assessment-taught students will be experiencing a series of successful learning experiences, causing them to be more inclined to want to learn more (Stiggins & Popham, 2008).

What Black and Wiliam (1998b) and other motivational research (Assessment Reform Group, 2002; Sadler, 1989) clearly show is that the type of feedback given to students affects their achievement, but also motivation to learn. Specifically, what makes the difference is the use of descriptive, criterion-based feedback as opposed to numerical scoring or letter grades (Stiggins et al., 2006). Motivation is also increased when feedback is targeted towards the individual student and emphasizes that the learning is most important for that learner as opposed to points or letter grades, and when feedback focuses on strengths and/or weaknesses (Stiggins et al., 2006).

Shepard (2000) reflects on social psychological research indicating that when teachers communicate to students that taking risks is part of the learning process and is normal, student are more motivated to persevere in attempts to think more critically. Teachers attending to the motivational effects that assessment can have, show students both what they have learned and what they need to learn next, motivating students to continue in the learning process (Stiggins et al., 2006).

In response to the comprehensive research that clearly exists on the benefits of formative assessment and the positive affects it has on student motivation and achievement, particularly in low-achieving learners, these new understanding of the potential of formative assessment belong in effective professional development programs that will inspire teachers to use formative assessment strategies in their

teaching and assessment practices. Long established, traditional assessment practices grounded in behaviorist-differentiationist theories in conflict with formative approaches to assessment based in cognitive-situative theories must be challenged.

Educators and decision-makers must regard formative assessment with the highest priority, particularly when it comes to providing professional development on the subject of formative assessment, exposing and training teachers in these current and emerging trends and views of assessment. Professional development on formative assessment, if effective, can provide teachers with the information they need to move learning from a behaviorist-differentiationist view to a more cognitive-situative view, further engaging students in their learning. As Stiggins (2005b) remarks, "Formative assessment turns the classroom assessment process and its results into an instructional intervention designed to increase, and not merely monitor, learning for all students" (p.45).

If formative assessment is to be an integral part of professional practice, effective professional development programs, like the one our district has been providing for the last five years, may be the impetus that teachers and administrators need to make the mental model shift to a more cognitive-situative view of teaching, learning, and assessing.

Professional development in the way of Professional Learning Communities (PLCs) or Learning Teams are necessary to combat the traditional, yet ineffective assessment practices and bring about this renewed vision of learning, teaching, and

assessment. This renewed vision is only brought about through progressive leadership directing this change through this type of professional development.

Professional Development, Leadership & Change

In order to move our district from a traditional, behaviorist-differentiationist view of teaching, learning, and assessment to a more progressive view, based on more recent understanding of humans and learning, through the implementation of formative assessment principles, our leadership team has provided a multi-year professional development program using professional learning communities (PLCs) and a Learning Team approach to encourage this transformation to occur in our district.

Professional Development

In order for school leadership to influence real change and increase capacity in the formative assessment practices of teachers and encourage the transformation from a summative, behaviorist-differentiationist view of learning and assessment to a formative, cognitive-situative view, schools and districts must have a professional development program to increase the participation in and implementation of formative assessment principles that aligns to contemporary understanding of how adults learn and choose to change their practices in the classroom.

In looking at professional development as it relates to assessment, the publication of the *Standards for Teacher Competence in Educational Assessment of Students* in 1990 called for widespread staff development in the area of assessment; likewise, numerous researchers document evidence concerning the need for extensive training of educators in the nature of assessment (Calveric, 2010; Davies, 2000; Guskey,

2007, Stiggins, 1991). In 1993 the Joint Committee on Competency Standards in Student Assessment for Educational Administrators determined that the three most needed skills by teachers included: knowing terminology associated with standardized tests, knowing the purposes of different kinds of testing, and understanding the connection between curriculum content and various tests (Impara, 1993).

The Joint Committee also developed a set of standards for the evaluation of educational programs, providing the conceptual and practical foundations effective professional development programs (Yarbrough et al., 2011). The thirty standards were devised to help judge and guide evaluations, and all pertain to the four attributes of an evaluation: utility, feasibility, propriety, and accuracy (Stufflebeam, 1983). Two years later, the National Council on Measurement in Education published the Code of Professional Responsibilities in Educational Measurement, requiring all professionals involved in any facet of educational assessment to improve professional competence in educational assessment (NCME, 1995).

Despite these national endeavors at improved assessment education and development, only twelve states require assessment competency for licensure attainment, and not even one state licensing examination incorporates assessment skills for verification of competence (Reeves, 2007; Stiggins, 2002). As a result, higher education institutions have taken little note of the need to produce assessment literate teachers (Reeves, 2007; Stiggins, 2002). This lack of teacher preparation at the postsecondary level has necessitated effective professional development in the area of assessment in most districts (Calveric, 2010; McLaughlin & Talbert, 2006; Stiggins, 2002).

As with any education innovation, support from administration in the way of professional development is essential, and one structural way school leaders can support change in this area is to help peer groups of teachers find time to meet on a regular basis, with opportunities for teachers to report to all faculty and staff meetings (Black et al., 2004; Bolman & Deal, 2008). Wiliam (2007) knows that what teachers do in the classroom is what directly improves student achievement, but teacher thinking can sometimes change through professional development without necessarily changing teacher practice; however, the only thing that impacts student achievement is teacher practice. This is an example of the "say/do" gap that often exists with professional development, in that teachers are able to express what it is that professional development aims to change, but often they do not actually implement the change (McLaughlin & Talbert, 2006).

Elmore (2004) agrees by stating that decades of teacher reform have only touched the surface through structural and curriculum initiatives that have failed to get inside the classroom in any telling way. So if school leaders are serious about raising student achievement, they must focus on helping teachers change what they do in the classroom, and "changing teacher's minute-to-minute and day-by-day formative assessment practices [through effective professional development] is the most powerful way to increase student achievement" (Wiliam, 2007, p. 200-201).

Professional development works best when it is on-site, job embedded, continued over time, and focus on student achievement, (Chappuis, 2007; Hall & Hord, 1987; Hord, 1997; Wenger, 1998) and content-focused with sufficient intensity and

active learning opportunities that leverage the social nature of learning (DeSimone, 2009). Workshops, teacher institutes, and products that facilitate teacher learning of certain strategies are helpful toward improving student performance (Black & Wiliam, 1998b; OECD, 2005); however, when the workshop or conference is over, continuing support for implementation is seldom available (Chappuis, Chappuis, & Stiggins, 2009).

Implementing a strategy of change through professional development within schools requires a model that is focused on deep learning, embedded, and ongoing, necessitating collaborative sharing among teachers (Chappuis et al., 2009; Hall & Hord, 2011; Hord, 1997; Wenger, 1998). Elmore (2007) states that the improvement strategies need to be both complex and simple; complex in that it has to operate across a number of social, organizational, cultural, and technical dimensions simultaneously; simple in that they have to have a clear design that everyone in the system can understand and use in order to give purpose to their work. According to Darling-Hammond and McLaughlin (2011), effective professional development involves:

teachers both as learners and teachers, and allows them to struggle with the uncertainties of both; it also must engage teachers in concrete tasks that clarify the learning processes; it must be grounded in inquiry, reflection and experimentation that are participant-driven; it must collaborative, and connected to and derived from teachers' work with students; it must be sustained, ongoing, intensive, and supported by modeling, coaching, and the collective solving of problems of practice; and it must be connected to other aspects of school change."

This description of PD emphasizes both the cognitive theory view of learning in that it is grounded in problem-solving and inquiry, driven by reflection and experimenting, all aspects of cognitive learning theory. A situativist would recognize the collaborative nature of the successful professional development endeavor, particularly as it relates to the relationship between student and teacher. By realizing that professional development that is grounded in cognitive and situative theory, it serves as a model for the type of learning and learning experiences that formative assessment aims to construct in the classroom for the student: both collaborative and inquisitive in nature.

Teachers and school leaders can all benefit from the professional development that instructs how to use formative assessment data in order to make improvements to instruction (Chappuis, 2006; Popham, 2008; Stiggins, 2008). A comprehensive plan will increase the ability for teachers to implement formative assessment strategies, and encourage teachers to put into practice the research-based assessment principles. Professional development initiatives like this usually prove to be quite challenging since assessment practices are deeply ingrained within the culture of teaching, relying on the conventions and traditions stemming from pre-NCLB era assessment concepts and habits, grounded in behaviorist and differentiationist theory (Bolman & Deal, 2008; Greeno et al, 1996; Wormeli, 2006).

According to DuFour and Marzano (2009), school leaders should structurally support collaboration by providing them with time and resources for collaboration embedded into the routine workweek. Guskey (2007) asserts that large-scale assessment programs grounded in differentiationist theory provide the foundation for nearly every modern education reform initiative, since policymakers see assessments as essential for change. However, assessments designed for ranking are generally not good

instruments for helping teachers improve their instruction or modify their approach to improve student achievement (Guskey, 2007).

Leadership

Effective, robust, ongoing professional development programs require effective leadership. Leadership has long been perceived to be important to the effective functioning of organizations in general and, more recently, of schools in particular. Perhaps the most widely cited is the review by Marzano, Waters & McNulty (2005) in *School Leadership that Works: From Research to Results* where Marzano, et al. (2005) demonstrate in their meta-analysis of 35 years of research that school leadership, particularly school principals, can have a substantial effect on the achievement of students in their schools.

Other empirical studies have shown similar results in that not only does leadership exhibit a strong relationship with school environment and professional community, but also is important in assuring professional development, shaping or supporting professional learning communities among teachers, and in supporting teachers in monitoring student progress and holding high standards for all students (McREL, 2005). The Learning from Leadership Project, suggest that when goals are set with a priority of improvement of student achievement, there appears to be more effort to achieve these goals, particularly when the goals are accompanied by high quality professional development (Seashore Louis, Leithwood, Wahlstrom, & Anderson, 2010).

In examining the impact of different types of leadership on students' academic and nonacademic outcomes, Robinson, Lloyd & Rowe (2008) showed that of the five key

leadership principal practices identified: (1) leading teacher learning and development; (2) ensuring quality teaching; (3) resourcing strategically; (4) establishing goals and expectations; and (5) ensuring an orderly and safe environment, the practice that had the greatest effect size (0.84) for student learning was leading teacher learning and development. This evidence shows that not only do school leaders make a difference in student achievement, but they also have an even greater impact when they act as instructional leaders in promoting professional development.

In order to move teachers from an outdated, behaviorist/differentiationist view of learning, teaching and assessment, school leaders must provide professional development opportunities that emphasize the strategies specific to cognitive-situative learning theory, specifically formative assessment practices, to better meet students' needs. According to Brown (2004), professional development must be carefully planned with adequate opportunities for discussion, in a structured setting where people adhere to agreed-on guidelines.

School leaders must take the role as a facilitator or coach in the professional development process, to train, team-build, and foster participation in order to provide satisfaction, motivation, and empowerment (Gallos, 2006). Fullan (2008) suggests that in order for organizations to make deep and lasting changes, like this mental model shift, leaders must "love their employees" in that all people involved in the school are treated with respect (p. 19). Through this respect, school leaders will find ways to get teacher "buy in" to the changes necessary to encourage the implementation of formative assessment practices as well as the shift from the behaviorist-

differentiationist model of learning, teaching and assessing, to the cognitive-situative model instead (Chappuis, 2004, 2006b; Greeno et al., 1996).

Leaders must also fully understand the principles of formative assessment and work with staff to encourage their integration into classroom instruction and practice (Chappuis, 2004, 2006b; Stiggins et al., 2004). As an example, leaders must provide language to translate academic concepts of formative assessment into practice and practical understandings for teachers, as well as providing guidance, encouragement, examples, and support to practice leading discussion regarding assessment practices (Marshall & Oliva, 2005).

The leader must also know and evaluate the teacher's classroom assessment competencies, helping teachers learn to assess accurately and use the results productively, assisting teachers in analyzing their own use of assessment and provide continued professional development activities that contribute to the use of formative assessment strategies (Chappuis, 2006b). Therefore, it is the responsibility of leader to rise to ensure that professional development exists to support the use of formative assessment strategies and encourage the mental model shift from behavioristdifferentiationist to cognitive-situative based learning theories (Chappuis, 2007; Elmore, 2006; Greeno, et, al, 1996; OECD, 2005; Stiggins, 2002; Stiggins et al., 2006).

Leadership takes more than what is traditionally understood as good leadership in order to achieve greater equity through improved assessment practices in American high schools (Theoharis, 2007). According to the extensive study in eight countries by the Organization for Economic Cooperation and Development (OECD) in 2005,

successful leaders in schools providing professional development to promote formative assessment strategies fostered school-wide cognitive/situative-based cultures of assessment and evaluation. The more that large scale, sustainable educational reform becomes the agenda through professional development, the more that leadership becomes the key to implementing sustainable change in teachers' mental models of learning and assessment (Fullan, 2002).

Change

To encourage teachers to make the shift from the summative or behaviorist/differentiationist theory of learning to the formative, cognitive-situative view requires challenging the status quo and traditions deeply engrained in our high schools. In *8 Forces for Leaders of Change*, Fullan, Cuttress, and Kilcher (2005) present eight "drivers" as keys to creating effective and lasting change (p.54). Of these eight, number five is "Developing cultures of evaluation" where the authors explain that one of the highest yield strategies for educational leaders is Assessment *for* Learning (Fullan et al., 2005).

Developing changes in the culture of assessment, as Fullan suggests, addresses the need for change in the traditional methods and styles of assessment that are often ingrained in the culture of a school, requiring a leader with a vision for change (Bolman & Deal, 2008). What can often prevent school leaders from implementing change is the accumulated years of traditional practice, scholarship, and theory, deeply embedded within outdated behaviorist and differentiationist theories (Greeno, et al., 1996; Marshall & Oliva, 2005). Most professional development creates temporary, localized

"flurries of change" but little lasting or widespread improvement (Hargreaves & Fink, 2004, p. 8). Innovation and change are only significant if their use can be sustained in schools, despite competing priorities, changing demands, and teacher and administrator turnover (Coburn, 2003).

According to Hargreaves and Fink (2004), authors of *The Seven Principles of Sustainable Leadership*, leaders must do more than manage change; they must pursue and model sustainable leadership by committing to and protecting deep learning in their schools; ensure that improvement last over time, especially after they are gone; distribute leadership and responsibility to others; consider the impact of their leadership on the school and communities around them; sustain themselves so that they can avoid burn out and persist with their vision; promote and perpetuate diverse approaches to reform; and engage actively with their environments. Following these principles that define sustainable leadership, school leaders can implement deep, broad, and long-lasting reforms, like the shift from a behaviorist-differentiationist view of learning and assessment to a cognitive-situative view (Hargreaves & Fink, 2004).

Teachers' Perceptions of Formative Assessment

Through the investigation of assessment history and policy, formative assessment strategies, leadership and professional development, it is now necessary to examine the scholarship on teachers' perceptions of formative assessment and professional development in order to consider prospects for further study. Teachers' perceptions of formative assessment as a result of professional development programs do exist, and several examples will be explored in this section.

Much of the research in the area of teachers' perceptions of formative assessment and professional development exists at the elementary level. In a study of elementary teachers' assessment beliefs and practices, elementary teachers indicated that a greater understanding of assessment beliefs and importance of assessment practices can contribute to the development of relevant professional development aimed at the improvement of teachers' assessment practices to contribute to greater educational success (Calveric, 2010).

In looking for factors that promote long-term change and commitment to formative assessment in elementary teachers' instructional practices, collegial interaction and the amount of experience a teacher had in the classroom both contributed to the level of commitment to formative assessment reform (Sherbinko, 2011). Similarly, identified factors in elementary math teachers' education and training that may be associated with their use of formative assessment included both professional training and instructional planning (Reed, 2007).

At the middle and secondary level, middle school teachers' characteristics, particularly age, explains the relationship between teacher beliefs and their use of formative assessment (Baynard, 2011). Grade levels taught and years of experience also seem to have an impact on teacher beliefs regarding the importance and implementation of formative assessment (Lowry, 2011). And similarly, teacher and administrator perceptions of an urban school's formative assessment process before and after targeted professional development determined that differences do exist between teacher and administrator perceptions of teacher use of formative assessment

in the classroom (Andrews, 2011). Teachers have a general level understanding of formative assessment and the connection between formative assessment and the adjustment of instruction, but still need development of formative assessment as a tool to improve student achievement (Gates, 2008).

In a study similar to my program evaluation, teachers' perceptions regarding professional development as related to formative assessment were examined to determine whether or not elementary teachers' professional development on the subject of formative assessment would change the participants' understanding and application of formative assessment practices in their classrooms, with results showing that a supportive environment such as a study group or learning team, where teachers could share their experiences, was necessary as they implemented new assessment practices (Richardson, 2010).

Although research regarding AfL professional development does exist, by evaluating my district's professional development program, we can determine the effectiveness of our program as well. This program evaluation study aims to show that effective professional development is necessary to support the shift from a behaviorist/differentiationist view of learning, teaching, and assessment to a cognitive/situative view where students are at the heart of formative assessment.

AfL is not just a growing trend in education, but also transcends educational thinking about assessment practice in American high schools into the post-NCLB, RTTT, twenty-first century.

Overview of the District 210 Professional Development Program

Lincoln-Way District 210 is made up of four high schools, Lincoln-Way Central, East, North and West, in the southwest suburbs of Chicago. Our district serves nearly 7400 students, 87% white, 12% low-income, and 72% meeting and/or exceeding State Standards. Although our district has not made Annual Yearly Progress in several years, we are proud that we have raised our standardized test scores significantly, moving our overall score up 5% in the last ten years. Our district boasts one of the lowest per pupil expenditures in the state, while maintaining these high standards of academic success. Our district has been led by the same superintendent for the last 24 years, Dr. Lawrence Wyllie, and our teachers average over 11 years' experience in teaching. Our district leadership team is made up of the district administration as well as the four building administrator teams. This district leadership team meets every Monday morning throughout the school year (at 5:45am), with break-out meetings taking place immediately at the conclusion of the full-team meeting. One of these break-out groups, the one that I participate in, is our Curriculum Leadership Team, made up of our Assistant Superintendent for Curriculum, our Director of Instruction, and each of the buildings' Associate Principals for Curriculum, Instruction and Staff Development. It was this group, at least five years ago, that began the journey towards AfL.

Fall 2007

Our AfL professional development program in our district began in the Fall of 2007 when our Curriculum Leadership Team attended an Assessment Conference in St. Charles, Illinois. On the last day, the final session we attended addressed the concept of

Summative vs. Formative Assessment. During this presentation, the group presented a video on assessment from a middle school in Westerville, Ohio, causing our group to seriously reflect on many of the ideas presented in the session and in the video, specifically on our own assessment practices and how those practices were linked to student learning and achievement.

Winter 2007-2008

Upon returning home from the conference, our team decided to "Google" the school in Westerville, Ohio that we had seen in the video, since we were particularly interested in the concept that the teacher referred to in the video as a "learning team." About a week later, coincidentally, we received an email from the school in Westerville promoting a staff development training that they were offering in January 2008. Upon request, our district granted release time for five curriculum leaders, including me, from our district to attend this workshop. The presenters from the video were the same at the workshop and at the school that we visited: Bob was the middle school science teacher with the practical approaches to formative assessment in the classroom, and Katy was the Westerville curriculum director. During breaks in the conference, Bob and Katy, seeing our intense interest in formative assessment practices, would spend time answering specific questions we had, and we all left the conference with intense energy and excitement for AfL and what it could mean for student achievement in our district. In fact, on the five hour ride home, the five of us talked about nothing else but formative assessment practices and principles, and the energy and excitement continued to grow.

In February 2008, the five of us presented to the district administration leadership team on our Westerville workshop experience, and by April 2008, with full support of our district administration, our AfL Learning Team pilot program was born. The pilot group consisted of at least one member from each academic department in each of our buildings, and three sessions were held during the months of April and May. The purpose of each session was to increase assessment literacy and ignite interest in AfL by sharing the information from both the original assessment conference but more significantly, the information from the multi-day workshop in Westerville. The sessions were modeled after the design of the conference we had been to, using information about the theory and design of formative assessment, as well as practical applications and how to take it back to the classroom (DuFour & Stiggins; DuFour et al., 2006; 2009; McLaughlin & Talbert, 2006).

From this pilot group and informational sessions, the group evolved from individuals who were obliged to attend as department representatives, to a solid Learning Team, with sincere interest and passion for the subject of AfL. McLaughlin and Talbert (1993) report that learning teams of this type "offer the most effective unit of intervention and powerful opportunity for reform" (p. 18) and that "participation in a professional community . . . supports the risk-taking and struggle entailed in transforming practice" (p. 15). Luckily, each academic department did have at least one person interested in continuing on in the Learning Team, and hence a school-wide movement had begun, led by a group of individuals interested in how AfL could have a positive impact on student achievement. It was also in January of 2008 that

"Assessment *for* Learning" became an agenda item at our Leadership Meetings, with the curriculum leaders using and presenting material from the Westerville conference.

Spring 2008

In May 2008, the curriculum team presented an update on the state of the Learning Teams in each building, followed by continued study through a series of Assessment *for* Learning webinars by Rick Stiggins. Each of these webinars was attended by all department chairs at each building, followed by discussion and plans to share information with all departments, with the understanding that these Leadership Meetings were now becoming yet another learning community within our school. By the end of May 2008, each building had established a Learning Team, eager and ready to begin again in Fall with a new school year, and based on the intense interest by our district curriculum team, AfL was added to our School Board goals for the first time for the 2008-2009 school year, and has been an annual board goal ever since then (Chappuis et al., 2009; DuFour & Stiggins, 2009; DuFour et al., 2006; McLaughlin & Talbert, 2006).

Fall 2008

In the Fall of 2008, the curriculum team developed the professional development plan, based on the board goals, to include monthly Learning Team meetings modeled after Bainbridge and Holman's (2007) *Assessment for Learning: Twelve Meeting Learning Team Plan*, the same meeting plan presented at the conference. Each meeting had a specific learning target and agenda, with a related

article on formative assessment in order to expose the team to the most recent

research on AfL, as shown in Table 1.

Table 1

Twelve Meeting Learning Plan

Meeting	Торіс	Learning Target
1	The Big Picture	I can discuss the general research supporting the profound effects of AfL on student achievement.
2	Five Keys to Quality Assessement	I can explain the five keys to quality can be used to create accurate assessments.
3	Assessment for and of Learning	I can describe the differences between assessment for an of learning.
4	Creating Clear Learning Targets	I can take the broad statements of state content and turn them into student-friendly classroom level targets.
5	Learning Targets and Student Involvement	I can describe strategies designed to bring students inside the assessment system.
6	Auditing	I can audit an assessment for clear learning targets.
7	Sound Design Using Target Method Match	I can select the appropriate assessment method to match the learning target.
8	Auditing Assessments for Sound Design	I can audit an assessment for sound design.
9	Descriptive vs. Evaluative Feedback	I understand the difference between descriptive and evaluative feedback and can develop strategies to give my students feedback on their learning.
10	Sound Grading Practices	I can identify the principles to sound grading practices and have developed understanding of

11	Sound Grading Practices	I can identify the principles to sound grading practices and have developed understanding of how to motivate students with learning.
12	Reflection	I can use AfL principles such as clear learning targets, assessment <i>for</i> learning, sound design, descriptive feedback, flexible and sound grading principles to maximize growth for all students.

how to motivate students with learning.

Note. Adapted from Bainbridge & Holman's (2007) *Assessment for Learning: Twelve Meeting Learning Team Plan.*

The Learning Team also began to read and discuss Ken O'Connor's (2007) book 15 Fixes for Broken Grades, discussing the content of one or two chapters per meeting, as recommended by the Westerville conference leaders. The representatives from each department in attendance were directed to present the information from our Learning Team sessions back to their departments to continue to improve assessment literacy, encourage the discussion on the topics related to formative assessment, and even create interest in participating in our Learning Team (McLaughlin & Talbert, 2006; Stiggins, 1991).

Fall 2009

In the fall of 2009, our curriculum team decided that not only should we continue with the already established Learning Team, but we should also begin again with anyone newly interested in the topic. We felt that the established Learning Team had certain needs, whereas people new to the topic of AfL had other needs. Therefore, the monthly meetings from the previous year were re-run this year, gaining another set of individuals from nearly every department to voluntarily be part of this second wave of Learning Team members, now "guided by a clear and compelling vision of what the organization must become in order to help all students learn" (DuFour et al., 2006, p. 3). The first group often came to and helped facilitate these meetings, having already been through the program, and already using formative assessment practices in their classrooms. These teachers gave a new voice to our program, and the second Learning Team took to the ideas in an almost aggressive manner, perhaps since the message was coming from their peers who had already been working with the concepts in their own classrooms, and buy in was quickly established with this second group as well (Chappuis, 2006b; DuFour & Eaker, 1998).

As for the first Learning Team, not only did they take part in facilitating the second team, but also continued to meet regularly as a Learning Team to continue their study of AfL, but more importantly, support each other in their use of formative assessment practices in their classrooms. This ongoing collegial support is an important aspect in any professional learning initiative capable of improving student learning (DuFour & Eaker, 1998; DuFour et al., 2006; Wiliam, 2007). These meetings often became sessions devoted to the discussion of what they were doing with certain formative assessment practices in their classrooms, seeking out opinions or suggestions for how to improve their own practices, sharing and collaborating new ideas to try, and lots and lots of problem-solving. As the facilitator of these meetings, I finally began to give up on putting too much on the agenda since the meetings seemed to drive themselves with the sharing and problem-solving from the teachers who are implementing formative assessment strategies in their classrooms. Our teachers in their classrooms.

learning teams were clearly demonstrating the need for addressing their own concerns, which is an extremely high priority in quality professional development programming (DuFour et al., 2006; McLaughlin & Talbert, 2006; Wiliam, 2007).

It was also during this school year that "Assessment *for* Learning" became a topic in our New Teacher Induction Program, as learning communities should "help socialize new teachers...by reinforcing norms of practice...and affirming expectations for teachers' ongoing learning and growth" (McLaughlin & Talbert, 2006, p. 8). AfL also continued to be an on-going topic of study and discussion in our monthly Department Chair Meetings, as assessment literacy continued to grow throughout our buildings. At this point, our Curriculum Team felt that we now had the structures and collaborative settings in place to make our professional learning sustainable, job-embedded, and integrated into the various roles and systems for our teachers to access it (McLaughlin & Talbert, 2006).

School Year 2010-2011

The 2010-2011 school year found Assessment *for* Learning to still be listed on the School Board goals, and with the split of Lincoln-Way Central into Central and West, our district now housed four distinct and separate learning teams, each facilitated by the curriculum leader in each building. The Learning Teams from the previous two years blended into one, one at each building, and each team continued to meet regularly to collaborate, discuss, and problem-solve the application of formative assessment strategies in their classrooms. As the facilitator, I, like my other curriculum leaders district-wide, continued to present new information regarding AfL at each meeting, and

this information, followed up by discussion, was also presented at department chair/leadership meetings, with the intention for each department chair to bring the information back to their departments (Fullan, 2002; McLaughlin & Talbert, 2006; Wiliam, 2007).

Also during this school year were a series of morning professional development sessions, we at Lincoln-Way East refer to as "Friday Mornings in Frankfort," where teachers meet a half-hour before school starts for a presentation on various topics, including AfL. These morning sessions are widely attended with the intention of providing yet another avenue for teachers to access professional development opportunities depending on their schedules and preferences, while still furthering the development of assessment literacy in our buildings. During these presentations, many of our Learning Team members presented and shared how AfL was working in their classrooms through a variety of formative assessment strategies, and through their presentations, we continued in our quest to move as many teachers as we could from a summative "Assessment of Learning" view of assessment to a more formative, "Assessment for Learning" view of assessment and learning (Greeno et al., 1996; Stiggins, 2002). And by having the actual practitioners of formative assessment present the how and why, more and more teachers were making this shift in thinking and assessing. Also during this year, our district curriculum team continued to seek out conferences, webinars, or any other opportunities to further our own understanding of AfL, with the goal of being able to bring back new and useful information to be shared

with our Learning Teams (DuFour & Stiggins, 2009; McLaughlin & Talbert, 2006; Stiggins et al., 2006).

School Year 2011-2012

The 2011-2012 school year was much like the previous year, with the continuation of the regular meetings of the Learning Teams, which by now had a solid foundation of core members. Some of these core members were so far entrenched in the study and application of formative assessment strategies in the classroom that they were now presenting topics related to AfL at state and national conferences in their subject areas. Our Learning Teams continued to invite and welcome new members, and the discussion, collaboration, and problem-solving continued during these regularly scheduled meetings. As in the past several years, the study and implementation of AfL still remained a school board goal, and department chair/leadership meetings, as well as New Teacher Meetings, still included topics related to AfL.

In June 2012, our curriculum team made up of the four Learning Team facilitators presented a five hour AfL summer staff development workshop where 40-50 faculty members, of all different levels of knowledge of AfL, attended. And as far as the 2012-2013 school year goes, the Learning Teams continue to meet regularly, the members of the team continue to influence others in adopting the formative assessment strategies and principles, inviting their colleagues to our Learning Team meetings for updates on AfL or, as in years past, simply discuss, collaborate, and problem-solve any aspect of formative assessment, and making that very important

theoretical shift from a Behaviorist-Differentiationist summative view of assessment to a Cognitive-Situative formative view.

Summary

According to Merriam (2009), the "function of the literature review is to provide the foundation for contributing to the knowledge base" (p. 72). The existing knowledge base on formative assessment clearly shows the benefits of AfL and the positive affects it has on student achievement, particularly in low-achieving learners. Therefore, long established, traditional assessment practices grounded in behaviorist-differentiationist theories in conflict with formative assessment principles and strategies must be challenged at the local level through professional development programs like the one this study aims to evaluate. If educators regard the development of AfL professional development programs in order to encourage and support a theoretical shift in order to challenge the traditional, yet ineffective assessment practices grounded in behavioristdifferentiationist theory and move towards a more cognitive-situative view of learning, teaching, and assessment, where formative assessment exists. Therefore, this proposed study aims to evaluate the AfL professional development program that certain teachers in our district have been part of by sharing their perceptions of their understanding, use and value of formative assessment.

CHAPTER III

METHODOLOGY AND PROCEDURES

It was my intent to evaluate of the Assessment *for* Learning (AfL) professional development program in my district, Lincoln-Way District 210, in order to discover how our teachers have come to understand, use, and value formative assessment strategies their classrooms as a result of having been active participants in the program for the last five years. It was my hope that the results of this program evaluation would guide our district leaders in deciding how we should proceed in our mission to move all teachers from a summative, behaviorist-differentiationist view of assessment to a more student-centered, formative, cognitive-situative approach that has proven positive effects on student learning, particularly in struggling learners (Black & Wiliam, 1998; Chappuis et al., 2009; Greeno, et al., 1996, Popham, 2008). In order to evaluate our AfL program, I have outlined in this chapter a review of the research questions that drove this program evaluation, as well as the research techniques and procedures used for this evaluation. I also share an explanation of how the data was gathered, analyzed, and sorted within this chapter.

Positionality

My role in education, and more specifically my role in Lincoln-Way District 210, as an active participant in the development and implementation of the AfL professional development program supports why I engaged in this program evaluation. Though this evaluation, I first hoped to gain evidence for myself and my own curiosity as to the effectiveness of our program thus far, especially since our district did not plan for a formal assessment to determine the efficacy of the program. Therefore, my other motive for doing this evaluation was to be able to provide information and guidance to my district curriculum team as to the effectiveness of our program in order to make decisions as to what to do next in our quest for the implementation of AfL principles in classrooms and the cognitive-situative shift without top down policy driving the change.

My role in this evaluation began with me as an active participant in the discovery, development, and participant in the AfL professional development program for the past five years. Therefore, I was curious to know if what our district has done with the Learning Team approach has influenced teachers to adopt AfL principles in their classrooms, and more importantly, if a grassroots approach to professional development can or does actually work in our district. I was also curious to find out how much teachers know about AfL, if they actually choose to use formative assessment strategies in their teaching, and if teachers have come to value AfL in their teaching beliefs. Basically, I wanted to know if our efforts have been building reform momentum with formative assessment strategies being used by our teachers in order to engage students and improve student achievement, proving a shift to a cognitive-situative approach to learning and assessment had occurred.

If our grassroots AfL professional development plan, grounded in both cognitive and situative learning theory, has been effective over the last several years, then I also wanted to know how to build even more momentum and grow it even stronger without

having to put policy in place to dictate what teachers must do. As neighboring districts have shown to be true, mandated formative assessment policy is often misinterpreted, misunderstood, and therefore implemented incorrectly, for the wrong reasons, and usually with poor attitudes. I was interested, therefore, if there were implications that a grassroots approach like ours was more successful in transitioning our teachers to a more cognitive-situative approach to assessment than our neighboring districts. However, if our grassroots AfL program had not been successful, then I wanted to be part of the design to shift our efforts in whatever direction is necessary to make the cognitive-situative shift a success. Most of all, I wanted to know if AfL momentum is growing and making the difference in student achievement that only AfL can.

My position in our district has changed throughout the years, but I have always been part of professional development in some manner. I was originally hired by our district in 1994 to teach English. As a new teacher, I was required to participate in New Teacher Induction meetings full of professional development opportunities intended to acclimate me, and other new teachers, to the procedures and culture of our district. While teaching English for the next thirteen years, I participated in nearly every professional development program that our district offered, including programming on Understanding by Design (UBD), the Reading program that our district embraced about ten years ago (that I was asked to teach), Data Analysis (from Abacus to Mastery Manager), and any other initiative that the district presented during this time. I also enrolled and paid for 15 credit hours of professional development from the Professional Learning Systems (PLS) group before enrolling in Governor's State University for my

Masters in Administration. I then completed 30 more hours of professional development beyond the degree. At this point in my career, I feel that I have had a robust amount of experience with professional development, and the evaluation of this particular program was essential to know how our district is doing with its implementation, and for me personally, how my participation in the program has affected the results.

The implementation of our district's AfL professional development plan has included me every step of the way. As an assistant principal five years ago, I was part of the curriculum, instruction, and staff development team that originally researched and presented AfL as a powerful learning and assessment theory. I was also part of the initial team that created, coordinated, and facilitated the original Learning Teams, as well as the Teams that followed in subsequent years. I have been part of the district's commitment to AfL since the beginning, and this was why I was seeking to evaluate our districts' progress in this area. Because I was interested in "understanding the meaning people have constructed" about AfL in our district, a qualitative research method of evaluation was used to conduct the program evaluation; therefore, an explanation and justification for use of this method also follows in the chapter below (Merriam, 2009, p.13).

Evaluation Questions

To determine what teachers have learned in the AfL professional development program in terms of understanding, use and value of formative assessment strategies,

and if they had made a shift to a more cognitive-situative approach to learning and assessment, the following questions were used to conduct this program evaluation:

- 1. After participating in our professional development program, how do these teachers understand Assessment *for* Learning?
- 2. How do these teachers use Assessment for Learning?
- 3. What value do teachers place on Assessment for Learning?

Evaluation Procedures & Qualitative Techniques

Qualitative, interpretivist research methods were used in this program evaluation aimed to examine the understanding, value, and use of formative assessment by secondary teachers after five years of professional development. According to Merriam (2009), "the overall purposes of qualitative research are to achieve an understanding of how people make sense out of their lives, delineate the process of meaning-making, and describe how people interpret what they experience" (p.14). Therefore, it was my intention to use the perceptions and interpretations that teachers provided me in this evaluation to gauge and create an understanding of the effectiveness of our AfL professional development program.

Since Creswell (2003) describes characteristics of qualitative research to include methods that encourage participation allowing for analysis and interpretation, this evaluation aimed to use Creswell's description to inductively draw conclusions and discover understandings regarding our AfL professional development program through the perceptions of the teachers who have been part of the program for the past five years. These perceptions were gathered using three research designs: 1) document

analysis: 2) on-site observation: and 3) focus group interviews of participants by building. These designs are consistent with an interpretivist research approaches and provided evidence useful in program evaluation, and each is discussed here for its applicability to my research questions below.

Program Evaluation

I decided to evaluate this AfL program to determine if our leadership team has been effective in influencing teachers to understand, use, and value AfL with a more cognitive-situative approach through our grassroots AfL staff development program. Evaluation can be described as "the process of delineating, obtaining, and providing useful information for judging decision alternatives" (Stufflebeam, 1971, p. 36). With this definition in mind, it was my intent to use this evaluation to gather useful information from our teachers in order to interpret how well our AfL program has been understood and received by our teachers. The value of any evaluation is measured in the strength of the evidence produced, the trustworthiness of the evaluation to policymakers, and especially in the use of the evaluation information to improve policies and programs (Wholey et al., 2010). It was therefore my intent to use the standards put forth by the Joint Committee (2011) to assure that this program evaluation is valuable in that it produces solid evidence our leadership team can actually use, and more importantly, provide our team with information that only serve to improve our AfL program.

In 1980 the Joint Committee established a foundation for quality control and accountability of program evaluations, and devised 30 standards to assist in judging and

guiding evaluations pertaining to the four major qualities of evaluation: utility, feasibility, propriety, and accuracy (Stufflebeam, 1983). The 'utility' standards are intended to guide evaluations so that they will be informative, timely, and influential (Joint Committee, 2011). These standards relate to my program evaluation in that after five years of implementation, our program has yet to be evaluated, and I plan to share the results of the program evaluation with the rest of my leadership team in order to inform our team as to the effectiveness of our program thus far. The evaluation will then guide our decisions as to what direction our team needs to take in influencing further understanding and implementation of formative assessment strategies in order to further influence the cognitive-situative shift.

The 'feasibility' standards demand that educational program evaluations are easy to implement, efficient in the use of time and resources, cost-effective, and actually do-able (Joint Committee, 2011). With this evaluation, feasibility was not be an issue since it is my time and resources that are being used, without little to no cost for our district. Practical procedures are also clearly described and in place with this evaluation, an additional attribute within the feasibility standard.

The 'propriety' standard requires that evaluations are conducted legally, ethically, and with due regard for the welfare of anyone involved with the evaluation (Joint Committee, 2011; Stufflebeam, 1983). This standard considers the ethical and constitutional issues that can arise from human subjects and freedom of information, yet with the Internal Review Board (IRB) procedures in place for this evaluation, these standards are met by following the IRB protocol. Finally, 'accuracy' standards require

that information obtained through the evaluation be technically accurate and that the conclusions are linked logically to the data (Joint Committee, 2011; Stufflebeam, 1983). It was my intention through careful data analysis methods that I certify that the results of this program evaluation to be as accurate as possible. It is only through the thoughtful interpretations of data that I receive from the participants that I am able to make justified and accurate conclusions about the effectiveness of our AfL professional development program.

Because these program evaluation standards have become common practice of the work of educational evaluators and establish a valuable meta-evaluation tool, these four standards have been clearly taken into consideration in this program evaluation. Therefore, it was my intention and hope, due to the credibility of my evaluation in following the evaluation standards, to be able to use the evidence gathered in this evaluation to improve our AfL program and possibly even propose policy in the area of AfL for our district.

Through this evaluation I intended to be able to make decisions for the future of the program based on the results of the evaluation, particularly since the true purpose of any program evaluation is to "provide useful information for future decision-making" (Stufflebeam, 1983, p. 120).

Therefore, it is my intent and hope that this evaluation will help our team decide how we should proceed in order to improve and further develop the program for the future, since "the most important purpose of evaluation is not to prove but to improve" (Shufflebeam, 1983, p. 121).

Participants

In semi-structured focus group interviews of approximately sixty to ninety minutes in length, three different groups of secondary educators who have been part of Assessment *for* Learning teams for the past five years were asked to describe their understanding of formative assessment, explain how they use formative assessment strategies or practices in their own classrooms, and disclose on how they have come to value formative assessment through the professional development in which they have participated for the last several years.

The participants in these focus groups were also asked to provide any documents that would support their use of formative assessment, and further, allow me to observe their classroom through the lens the Danielson model for evaluation with a focus on Danielson's Domain 3d, Using Assessment in Instruction, for no more than fifty minutes.

Upon review of the data from the focus group interviews, observation, and document analysis, several themes emerged; these themes will be discussed in relation to the three research questions.

Focus Group Interviews Profile

The focus group interviews for this program evaluation were purposefully chosen from a group of teachers who have been part of an "Assessment *for* Learning" team for the last five years in the Lincoln-Way High School District 210.

Lincoln-Way learning teams. Each of the four high schools have had their own Assessment *for* Learning Teams for different lengths of time due to the recent openings

of North and West. Each Learning Team has different characteristics, depending on the leadership of each of the buildings. Although each team has met under the leadership of one of the associate principals, each one has had a similar schedule and agenda due to the program that each building leader followed under the direction of our district leadership. Each team was originally recruited via email and chosen due to their availability to be interviewed per building, and as previously mentioned, had all been participants in an "Assessment *for* Learning" team for the past five years.

Table 2

Participant	Building	Years' Experience	Degree	Other
1	Central	5	Bachelors +15	
2	Central	7	Masters	
3	Central	10	Masters	
4	Central	12	Masters +15	
5	Central	12	Masters	
6	Central	23	Masters +30	Dept Chair
7	North	5	Bachelors	
8	North	8	Bachelors +30	
9	North	9	Masters	
10	North	9	Masters	
11	North	21	Masters +15	Doct Student

Focus Group Participants

NSTA Presenter

12	North	22	Masters (2) Gold Apple
			Nat Brd Cert
12	West	5	Bachelors
13	West	6	Bachelors +15
14	West	6	Bachelors +15
15	West	7	Masters
16	West	7	Masters
17	West	27	Masters +30 Dept Chair

The participants in the Lincoln-Way Central team had various levels of experience, ranging from as few as five years' experience in teaching to as many as twenty-three years. Their levels of education range from bachelor's degree plus 15 credit hours to master's degree plus 30 credit hours. The Lincoln-Way North Learning Team has teachers ranging from five to twenty-two years' experience. The teachers hold anywhere from a bachelor's degree only to double masters degrees, and one member is currently enrolled in a doctoral program. One of participants was granted her National Board Certification two years ago, and this same teacher was just granted the Golden Apple award for excellence in teaching, primarily focused on her work in the area of formative assessment in world language learning. One of the other participants was invited to be a presenter at the National Science Teacher Association conference in Indianapolis in March 2012 on the subject of formative assessment in science education. The Lincoln-Way West Learning Team has one member who has been teaching for the past 27 years while the rest of the group has less than seven years' experience. Education levels range from bachelor's degree to master's degree, with that participant also serving as the Social Science department chair as well.

Participants were chosen purposefully for this evaluation, knowing that "purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (Merriam, 2009, p.77). Educators involved in this study included the secondary, general education teachers from three out of four of our Lincoln-Way High Schools (North, West, and Central) who have participated in our district's professional development program on AfL for the past five years. The total number of subjects ranged between 8 and 15 depending on how many agreed to participate in the study, and both male and female participants between the ages of 22 and 65 were invited to participate. It was my intention to engage participants in focus group interviews, including everyone who was willing to be interviewed regarding formative assessment.

In order to recruit these participants, Associate Principals at each of the high school buildings identified teachers who regularly attended AfL professional development opportunities for the past five years. After these names were shared with me, I directly contacted each of them with a recruitment letter via email, asking them to participate in the program evaluation. A copy of this recruitment letter is found in Appendix A, and any interested teachers directly responded to me via email, serving as consent to secure an interview time and/or observation date. The email contact was and will continue to be retained by me until the evaluation is complete, plus three years,

when this consent information will be re-disclosed.

It was my intent that coercion was minimized with the use of this email recruitment; unless potential participants responded favorably to the email invitation, they were not contacted again. All research requirements were specified in the email recruitment letter, so potential participants could make a decision to participate or not based on the evaluation requirements. Also, signed written consent for audiotaping of the focus group interviews was also obtained prior to the discussions.

My role as Associate Principal in the fourth high school allowed me access to these participants without directly influencing those who are part of the AfL team in my own building. Although my building team would have been more than happy to share their experiences in the program, I understood that my role as their supervisor might influence their take on the AfL program. As a result, I chose not to include participants from my high school in the program evaluation. This was an intentional effort to reduce or avoid bias in this program evaluation. Also, my role as part of the curriculum team that has researched, designed, and implemented this AfL professional development program has given me great interest as to how these participants would respond to the questions regarding their understanding, use, and value of formative assessment in determining if they had truly made a cognitive-situative shift towards learning and assessment.

Data Collection

Three different types of qualitative data collection were used with this program evaluation: 1) document analysis; 2) observation; and 3) focus group interviews. Each of

these data collection methods helped to uncover meaning, develop understanding, and discover insights relevant to the research problem (Merriam, 2009). In this evaluation, the interviews were conducted at each school as part of a focus group of Learning Team participants. Observations grounded in the Danielson model for evaluation, with an emphasis on assessment, were done in the classrooms of several participants, and documents included many types of written evidence that the participants shared with me, as they believed they demonstrated their understanding or use of formative assessment practices or strategies in their teaching.

Focus Group Interviews

Several educators at one time were interviewed for this study, grouped together by school building team, as a focus group of professional development participants (Patton, 2002). These participants were a group of teachers who were asked to reflect on specific questions related to formative assessment, whereby they were able to hear each other's responses and make additional comments beyond their own initial responses as they were able to hear what others had to say during the focus group interview process (Patton, 1987). Therefore, the purpose of these focus group interviews was to get high quality data and perspectives in a social situation where the teachers are able to consider their own views in the context of the views of the others (Patton, 1987). As Morgan (1988) explains, "The hallmark of a focus group is the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group" (p. 12). By interviewing the participants as a focus group, the participants saw themselves as a true learning team, which allowed

them the freedom and encouragement to speak freely about the AfL program of which they have been a part (Morgan, 1988; Patton, 1987).

As previously explained, all participants were recruited via email with the recruitment letter, explaining the focus of the program evaluation as being their understanding and use of formative assessment strategies in their teaching. After participants agreed to the interview, meetings were scheduled in a private, familiar, and comfortable place of their choosing (e.g., a classroom or office with a door), and in order to maintain confidentiality, conducted outside of school hours.

Lasting approximately 60-90 minutes, the interviews were conducted after school in the community rooms of two high schools, and a department office by the last building team. After the focus group interviews were complete, I then summarized the interview content, and the participants were all sent a copy of the summary, giving them the opportunity to add, delete, or amend information. By doing this, it was my intention to make every effort to maintain the integrity, trustworthiness, and authenticity of this evaluation (Patton, 2002). I then analyzed and coded each interview transcript by theme, and any and all reoccurring themes were discovered, analyzed, and summarized for the purpose of this evaluation (Merriam, 2009).

The decision to organize focus group interviews in order to gain knowledge was deliberate in order to allow these teachers to speak freely with me and each other in a comfortable setting, allowing me to attain a significant amount of information in a relatively short amount of time. Rubin and Rubin (2005) comment that, "if what you need to find out cannot be answered simply or briefly, if you anticipate that you may

need to ask people to explain their answers or give examples or describe their experiences, then you rely on in-depth interviews" (p. 2-3). Focus group interviewing also allowed me to observe such things as body language and also delve into participants' experiences about the topic being studied, in this case, formative assessment. Merriam (2009) states that, "interviewing is necessary when we cannot observe behavior, feelings, or how people interpret the world around them" (p. 88).

For the purpose of this study, semi-structured focus group interviews were used to allow for a standardized set of questions to be used, but still allow the researcher the flexibility to ask follow-up questions to give way to further information for the study (Merriam, 2009). The same set of open-ended questions was used for each building group interview to ensure uniformity. Marshall and Rossman (2006) encourage this type of interviewing dialogue with an emphasis on "superb listening skills…personal interaction, question framing, and gentle probing for elaboration" (p. 102).

During the focus group interviews, elaborate notes were taken, even though the interview was audio-taped and transcribed for coding and analysis. I took great care to accurately record responses, particularly noting specific quotes that are of interest to me. These notes served as my summary of the focus group interviews. I was also an active listener, often restating what the interviewees said for clarification, and I often asked follow-up questions to probe certain ideas further within the group.

Immediately following each focus group interview, it was my intention to follow up with any participant who thought my summary is not what he or she intended, as it was my full intention to be as accurate as possible during the focus group interviews,

paying attention to what interviewees say to decide if there needs to be a second interview for clarification, and also for the analysis and coding to come (p. 204). Therefore, in order to increase the trustworthiness and integrity of my evaluation, copies of the summary were given to each interviewee for member-checking, or respondent validation, defined as "feedback solicited on emerging findings from the people whom were interviewed," where participants were asked if the interpretation "rings true" (Merriam, 2009, p. 217). The transcripts were emailed to the respondents, and they were asked to read over the summary to ensure the responses had been interpreted accurately. If clarifications, additions or deletions are necessary, the respondents were to make them on a paper copy and resubmit it to me in person. However, none of the participants made any such clarifications, additions or deletions to the summary document.

After the member-checking was complete, I also asked the educators if they would allow me to visit their classrooms in order to observe their use of formative assessment in action. The teachers had the right to deny such visit, or only allow the visit on a day and during a period of instruction of their choosing. In agreeing to be part of the focus group interviews, the teacher did not *necessarily give me permission to observe, so this distinction was made at this time.*

Observation

In addition to interview, an additional qualitative research method that was utilized in this program evaluation was observation. The purpose of the observation was to gather first hand evidence of the various formative assessment strategies in real

time in the classroom. According to Merriam (2009), observations take place in the setting where the phenomenon naturally occurs and data represents a firsthand encounter with the phenomenon rather than a secondhand account obtained in an interview.

After the interview process, participants were asked if they would be willing to be observed in their classrooms in order for me to observe their use of formative assessment strategies in the classroom setting. It is in this setting that I took extensive observational notes about the setting and participants, as the physical environment can provide important information about the participants and the phenomenon (Patton, 2002). I also recorded observations using a protocol from Danielson's (2007) model for assessing teachers, describing the setting and participant's actions throughout the observation, therefore allowing me to draw first hand conclusions regarding the use of formative assessment strategies in teachers' classrooms.

Danielson's (2007) frameworks for teaching had been specifically chosen since our district, like other districts across the state, is in the process of creating a new evaluation tool that will be grounded in Danielson's Domains, per Illinois State Board of Education's requirements. Danielson has very explicitly placed AfL in her model of effective teaching, now widely used throughout the United States for teacher evaluation. Here was an opportunity for our teachers not to only share with me what they were doing in their classrooms in terms of formative assessment strategies, but also get introduced to the elements of the Danielson Domain as they pertain to AfL (Danielson, 2007). Danielson's framework clearly addresses the various aspects of

formative assessment that make up effective teaching. Specifically, I drew upon Danielson's Domain 3: Instruction where she emphasizes: (1) Communicating with Students to determine if learning expectations were clear for students; (2) Using Questioning and Discussion Techniques for student participation and eliciting information about student progress towards those learning expectations, and most importantly; and (3) Using Assessment in Instruction to observe the monitoring of student learning, feedback to students, as well as student self-assessment and monitoring of progress (Danielson, 2007).

Observation is a significant means for collecting data in qualitative research; it offers firsthand account of the situation under study and, when combined with interview and document analysis, allows for a comprehensive interpretation of the phenomenon under study (Merriam, 2009). Observation also helps to close any say-do gap where people tend to inflate what they say, and not follow through with as much do as say. For this evaluation, the observation data was analyzed and synthesized to accurately develop a sense of the teachers' understanding and use of formative assessment in the classroom after five years of professional development on the topic of formative assessment to determine if the teacher had actually made the shift to a more cognitive-situative approach to instruction and assessment.

Document analysis

In addition to interview and observation, a final qualitative method of research I used was that of document analysis. According to Merriam (2009), documents are a "ready-made source of data easily accessible to the imaginative and resourceful

investigator" (p. 139). After the interview and/or observation process, participants were asked if they would be willing to share any documents that may serve as evidence in the understanding or use of formative assessment. This could include, but was not limited to, class syllabus, short-term or long-term assessments, student self-assessments, homework or class assignments, gradebook pages, or any other written document that included or showed the use of formative assessment strategies. Documents of all types could help me uncover meaning, develop understanding, and discover insights relevant to the research problem (Merriam, 2009).

These documents were then considered evidence of the teachers' understanding and use of formative assessment in their classrooms, and were then analyzed and synthesized into evidence for the research questions. Some of the documents were also used during the focus group interviews in order to ask the teachers to explain why they believed their documents were examples of AfL practices, or for further explanation of the documents themselves.

Written notes, observation notes, transcriptions, documents, and digital audio recordings are maintained in my home or private office in a locked file cabinet or as password protected digital resources to which only I have access. Although I was the only one to have access to the data, this information was analyzed and reviewed in conjunction with my Principal Investigator (PI). Along with my PI, the challenge then becomes to make sense of the interview transcriptions, observation field notes, and shared documents through extensive data analysis (Patton, 2002).

Data Analysis

As explained, I collected the data through interview, observation, and document analysis in order to perform a confidential, thorough data analysis with my PI. Data analysis is a complex process for finding the meanings, understandings, or insights of a study (Merriam, 2009). Therefore, in order to make meaning out the data from the interview transcriptions, observation field notes, and documents, the data were then coded, whereby I assigned a shortened method for the different portions of the data so that they are easily retrieve specific parts or topics (p. 178). According to Creswell (2003), data analysis begins by reading interview transcriptions, field notes, and supporting documents to gain a general sense of the data. In order to code the focus group interviews, patterns and themes in the participants' responses were scrutinized as how the answers related to research questions, often referred to as open coding (Corbin & Strauss, 2007). As the statements were compared and contrasted, certain themes and topics based on the research questions forming axial codes as emerging themes and patterns among them discerned across research designs were identified and documented with a notation in the margin. Later, the notes in the margins were analyzed and abbreviations were created based on the content of the marginal notation. These abbreviations became the codes that were ultimately grouped together into themes, creating categories. Marshall and Rossman (2006) state that, "the researcher engages the ideas and the data in significant, intellectual work...he then generates the categories through prolonged engagement with the data—the text. These categories then become buckets or baskets into which segments of text are

placed" (p. 159). The categories were then compared, allowing me to make certain conclusions based on the themes within the categories and the research questions presented by the researcher. Clear themes and conclusions then emerged from the data, allowing me to draw significant conclusions regarding our district's AfL professional development program.

Benefits & Risks

As part of the leadership team that initiated this professional development program, I was, and still am, very interested in using this program evaluation to determine the effectiveness of our program, decide what direction our district needs to go next in the pursuit of AfL theory in all our teachers, and develop research-to-practice theory on the understanding, use, and value of formative assessment for secondary teachers. The results are particularly useful to administrators when designing staff development opportunities with regard to AfL. Teachers who are considering implementing formative assessment strategies in their own classrooms should also find the results of this program evaluation useful as well. The participants of this program evaluation have benefitted by processing through and reflecting upon their own understanding, value, and use of formative assessment to influence student achievement, hopefully leading to even greater insight in their application of AfL.

There were minimal physical, psychological, or social risks to this program evaluation. However, the participants may have been concerned that the information revealed in the interview or through classroom observation or document analysis regarding their understanding, use, and value AfL could be disclosed to their superiors

and/or evaluators and somehow affect their employability. Those participants with strong feelings about AfL may have feared that their reputation would be affected by information gained from interview, observation or document analysis being revealed to their colleagues.

To minimize any employability risk, interviews were conducted in settings that provide the maximum amount of privacy and confidentiality to each participant. Documents were collected only if participants are willing to share them. Observations were done in classroom settings upon invitation only. Pseudonyms were used during interviews and in any written notes, documents, or written report. As indicated in the consent form, participants also had the right to refuse to answer any questions of their choosing. But because the risks are minimal, the opportunity to discuss and reflect upon their educational practices was believed to outweigh any potential risk.

One last risk would be that of my own bias towards this topic. As previously mentioned, I have been a part of the original leadership team initiating our district's work with this topic since its inception. Not only have I been an integral part of its development, I have also served as a building team leader and facilitator of the Learning Team for the last five years. Although, I have purposefully not interviewed, observed, or requested documents from any of the learning team members at my building, it is important to note that I do have a sincere and profound respect, and possibly, therefore, bias towards AfL theory and formative assessment strategies and practices. Due to my close proximity of the subject matter of this program evaluation, the potential for bias could have been a potential risk.

The final product of this program evaluation is a written report and oral presentation to my dissertation committee. After that time, all paper materials related to the evaluation will be shredded upon completion of their use, electronic copies will be permanently deleted, and audio files that are no longer needed will be erased or permanently deleted. Upon completion, it was my hope that this program evaluation would provide me and my district with valuable information and direction regarding our AfL professional development program and guide us in the process of understanding, using, and valuing formative assessment in order to shift teachers from a behavioristdifferentiationist view of learning and assessment to a cognitive-situative approach to improve teacher efficacy and ultimately, and most importantly, student achievement.

CHAPTER IV

RESULTS, ANALYSIS, AND DISCUSSION

The following chapter examines the three research questions that guided this program evaluation regarding teachers' understanding, use, and value of formative assessment by secondary educators who have participated in Assessment for Learning professional development for the last five years. The focus of this professional development supported teams of teachers in four high schools to make a shift towards cognitive-situative view of teaching, learning, and assessment aligned to the Danielson teaching framework used in Illinois to evaluate teaching. Findings in the areas of teacher background and experience, and collective thoughts of the participants were gathered through the focus group interviews, follow-up observations, and document analysis. With close scrutiny of the data, themes were identified, examined, and, understood as a shift from differentiationist and behaviorist views of assessment, what I have called Assessment OF Learning, to cognitivist and situativist views, or what I have called Assessment for Learning (AfL). In presenting these findings, the shifting interpretations and practices among the teacher teams presents a nuanced and compelling story of changes towards AfL that coexist with the dominant AofL traditions in a suburban high school setting.

The four evaluation questions asked teachers in these teams to consider their understanding, use, and attributed value of AfL as a result of their participation in our district's learning team professional development. In answering these three evaluation questions, the evaluation suggests that the shift from AofL to AfL, or behaviorist/differentiationist to cognitive/situative, has occurred through five significant and meaningful findings: 1) the impetus for learning is found within the student; 2) teachers and students work together towards learning; 3) teacher surrender of control over certain student behaviors; 4) teachers finding ways to accommodate the traditional assessment system; and 5) assessment is simply a part of what is now considered "good teaching."

Evaluation Purpose

The purpose of this program evaluation was to determine how teachers have come to understand, use, and value formative assessment by teachers who have participated in professional development in the form of Assessment *for* Learning Teams for the past five years. The professional learning in AfL implies a shift in ideas about how students learn that I have represented as Differentiationist/Behaviorist compared with Cognitivist/Situativist. This is a seismic shift for teachers working in a traditional high school in a suburban setting wherein families are ambitious for achievement and optimal postsecondary choices. How have these teachers negotiated the change and maintained their work in ways that meet the expectations around them that are not always supportive of AfL? A key feature of AfL is formative, student-engaged assessment (Black & Wiliam, 2003). Formative assessment has lasting impact on student achievement, particularly with struggling learners, so it is important to explore if our professional development efforts have been effective in influencing teachers to

understand, use and value formative assessment (Black & Wiliam, 1998; Stiggins, 2005; Chappuis, 2006; Popham, 2008).

Evaluation Questions

As mentioned, three major research designs were used to elicit and examine the effectiveness of Lincoln-Way's professional development to enhance AfL in district high schools: 1) focus group interviews; 2) follow-up classroom observations; and 3) analysis of related artifacts.

The evaluation questions were carefully designed to elicit responses from the teachers in order to determine the effectiveness of our program. The program would be considered effective if teachers had come to understand what AfL is, in that they could with reasonable clarity, explain the overall concepts of AfL. Beyond understanding what AfL is, the true measure is then if they took that understanding of AfL and actually used some of the strategies associated with AfL and implemented them in their teaching. This would address if there was a gap in teacher understanding and actual implementation. And finally, the last evaluation question was designed to determine if teachers had actually found value in understanding, and more importantly, using AfL strategies in their teaching. Teachers not only understanding and using AfL in their teaching is important, but to have them also truly see the value of AfL would be a significant piece in exploring the effectiveness of this program.

Evaluation Findings

By asking these Learning Team teachers how they have come to understand, use, and value AfL in their own teaching, several major findings developed as related to the

evaluation questions to show that a shift has occurred towards a more cognitivesituative perspective of learning. Through the exploration of Evaluation Question 1 related to the understanding of AfL, the following major cross cutting ideas emerged: 1) teachers now locate the impetus for learning within the student and 2) teachers now find themselves on the same team with students in the learning process. Evaluation Question 2 pertaining to teacher use of AfL resulted in the following findings: 3) teachers now surrender control of certain student behaviors and 4) teachers must often accommodate for high school traditions. And through Evaluation Question 3, related to the attributed value teachers place on AfL, it was discovered that 5) teachers now regard the formative assessment process as good teaching.

Evaluation Question 1: Teacher Understanding of AfL

Evaluation Question 1 asks how teachers have come to understand formative assessment, or Assessment *for* Learning, after participating in the Learning Team professional development program. By understanding AfL, teachers will have begun the theoretical shift from a traditional behaviorist-differentiationist view of learning to a more student-centered, cognitive-situative perspective. It is also worth noting that this educational shift is both timely and significant in that it conceptually aligns to the Danielson model, the model from which our evaluation tool, and all evaluation models, is designed. By asking how they have come to understand AfL, these teachers will have taken pioneering steps towards the type of teaching, grounded in cognitive-situative theory, that the Danielson model rewards.

Key findings made in response to Evaluation Question 1 all stem from the variety of descriptions and descriptors of formative assessment that disclose teachers' overall understanding of what formative assessment is. By discussing their own personal definitions and descriptions of Assessment *for* Learning, ideas developed that suggested shared definitions and understandings of AfL among the groups of teachers. Two major findings related to teacher understanding of AfL emerged from this evaluation: 1) teachers find that the impetus for learning is now within the student and 2) teachers now regard themselves on the same side of teaching and learning with their students.

Impetus for Learning on the Student

The first finding, that teachers now regard the impetus for student learning within the student, was made evident through Evaluation Question 1 which is related to teacher understanding of AfL. Teachers noted their understanding of assessment *of* and *for* learning, with the idea that AfL and formative assessment strategies associated with AfL focuses on engaging students in the learning, and therefore assessment, process. By engaging students in the assessment process, teachers expressed and demonstrated how they have come to understand AfL by noting shifts in their understanding of AfL. The first findings emerged through the teachers' understanding of: 1) Student Involvement, 2) Non-graded Opportunities for Learning, and 3) Use of Pre-tests.

Student involvement. Involving students in the assessment and learning process was a significant discussion point, as teachers shared how a "key and crucial" part of AfL is that students are now part of the assessment process with the purpose of actually working to improve student achievement by making teaching more responsive to

students in real time. Teachers noted that AfL supports the idea that students take ownership and that teachers should not do for students what they can and should do for themselves. Therefore, teachers are now not only to analyze data, identify skills, teach and reteach, but now it is so imperative to involve students in this process as well by making connections and asking students to reflect on them. This is clearly evidence of a both cognitive (i.e., based on each student's mental schema and development) and situative (i.e., based on social learning processes) shift, as teachers move to the side, allowing for students to find the impetus for learning from within, and own the learning for themselves. As one group participant shared,

If students get something wrong, for example, they work to figure it out, process it for themselves, and work on it on their own, which has really, at times, turned the role of the teacher into more of a facilitator in the classroom and a presenter of opportunities.

Since this also involves peer-assessment and group work for students to work through their learning, this is clearly reinforcement of a situative shift whereby behaviorist approaches have been sacrificed for the good of the learning process within students. Teachers agree that the true nature or definition of AfL is when students learn how to use the assessments for themselves, especially when the students have practice assessments, can self-assess, so that they are now determining how their own learning is going, instead of the teacher always being the only source of knowing how the student is progressing. One participant elaborated on this by stating,

With a super-formal test, the teacher makes it, and it's the teacher, teacher, teacher, and then students just show up and try to do the best they can on it. Whereas if you use the AfL process, it drags them into it a little more and they become part of the assessment process, and then hopefully they think that they have a little bigger role in the classroom. And that's one thing I really like about it.

This teacher has come to understand that AfL means locating the impetus for learning within the student, clearly a cognitivist idea consistent with AfL. Lincoln-Way Learning Team teachers agreed that with the AfL process, students learn key learning skills by owning the assessment and learning process much more, giving them a more significant role in their learning.

These Learning Team teachers also claimed that by involving students in the learning and assessment process, students learn more by doing the formative assessments, leading to higher grades on the summative assessments resulting in students understanding that working towards mastery is "a valuable thing." In line with AfL theory, these teachers realize that mastery now depends on the student: "Students who see the value of both the feedback I give them, and the self-assessments that they do for themselves, find themselves doing well on the summative assessments," seeming to prove higher student achievement is a reality with AfL with the impetus for that learning squarely within the student, driven by involving students in the assessment

Teachers also shared the idea that it is pretty difficult to argue with a concept like AfL that is designed so that students learn more and are more successful. They shared that when there is a clear connection between student practice and success on a summative assessment, students know that the learning is now on them with teachers as resources, facilitators, and coaches. When students choose not to practice and then take a summative assessment and their lack of work is reflected in their performance,

then a conversation with that student can take place between the teacher and student regarding their lack of preparation. Students themselves come to understand the connection between their preparation and performance, whereby the AfL process becomes more relevant to the students so that they understand that the learning opportunities are what it takes to be successful It was also noted by this teacher that, "Summative assessments definitely need

to be worthy of the effort that students have put in with the practice assessments," also commenting that when the summative assessments are weighted highly, the more students become involved in their preparation for these higher stakes, summative assessments. This teacher's comments are again evidence of how AfL allows teachers to locate the incentive and impetus for learning squarely within the student. Students are now involved in their learning and in control of their success, a move towards a more cognitivist approach to learning.

Teachers also found it is important to bring in our district mission statement that states that students should improve both academically and socially, which goes along with the responsibility, self-awareness, and self-knowledge that occurs when teachers involve students in the learning and assessment process. According to this group of teachers, this is what AfL does if the teacher "does it right," and the only true measure would be to somehow measure their success after high school, in order to see if it was truly a successful movement in education. One participant in particular explained that he can give students vocabulary, concepts, and problems to solve, but he also can teach them to learn and be involved in the process, the ultimate goal of an educator. "We have taught them how to learn and have the tools, which are what AfL provides them with, to be really involved in the process of learning the content." Not only is this evidence that teachers have now found the impetus for learning to be within the

students, but these teachers find great value in this shift, a shift that has led teachers towards a much more cognitive and situative view of learning and assessment.

Non-graded opportunities. The AfL strategy of non-graded learning opportunities were another way that teachers find the impetus for learning clearly within the student, thereby increasing students' involvement in this ongoing learning process, and moving teachers to a more cognitive and situative view of learning and assessment. In observing one participant's class, it was noted that the students were checking in and reviewing their completed homework with the teacher, even though the homework did not "count" in the gradebook. This is clear evidence that it was the learning that students were most involved in, as opposed to playing the points game that grades can sometimes traditionally play for students. Also during this classroom visit, I observed that students were readily participating in the homework "check," and the few students that I observed who did not have their homework prepared were acknowledged by the teacher and then encouraged to follow along while the teacher went over the problems on the board; however, these students were not penalized for their lack of homework preparation.

Rather, they were directed to catch up and practice as much as they could before the "mastery quiz" that occurred immediately following the homework discussion on the board, keeping student involved in the learning process. This observation clearly showed that this participant has a sincere grasp on the concept of formative assessment, as opportunities for students to practice and master concepts penalty-free. The participant also shared with me that this homework practice was a

change to her procedures in her classroom as a result of having participated in the AfL Learning Teams and her understanding of how formative assessment should be practiced in the classroom.

With regard to this finding that teachers have now found the impetus for learning to be within the student, it was discussed that for most of the learning team teachers that students now opt to do non-graded and homework assignments for the sole purpose for learning. Teachers explained that certain types of homework are now "optional" in some classes, and students can "opt out" of homework assignments if they have self-assessed their own skills and content knowledge, and feel that they already "get it" and have mastered the material. The group then elaborated that with this new homework policy, students take responsibility for and decide for themselves if they feel it is beneficial to them to complete the homework or not, putting the responsibility for the learning squarely on the students, clearly one of the most significant understandings of AfL and clear evidence of a cognitivist shift and clear evidence that teachers now find the impetus for learning within the student.

In looking at one group member's syllabus, the teacher points out that he has explained to students and parents alike that

homework and quizzes are formative and designed to give feedback on what material has and has not been mastered to that point. Homework is designed with the unit test and semester exam in mind; therefore, the homework properly prepares students to be successful on the summative assessments.

This teacher explains that by clearly communicating this to students and parents, it is his hope they understand that non-graded opportunities like homework has value for the student in the learning process. Teachers decided that certain assignments that

are meant to be formative, such as homework, is often to be "graded" each day by the student as form of self-assessment, or by a peer as peer-assessment. In this way, nongraded assignments take on significant meaning for the student as they become evidence of progress towards learning standards. Therefore, students are "more in command of their own learning than ever before, especially before I learned and used AfL," as one teacher remarked. In addition, teachers do expect students to make an attempt at the non-graded opportunities, and how getting help on homework, for example, whether it be from parents or their peers, is now okay since the homework is very minimally included in grades, and students are intended to prepare and practice with the homework, no matter how it is completed.

Teachers also discussed how the more students get used to the reconceptualization of non-graded assignments as an occasion for feedback and learning, the more they are achieving. Since the work done in class is always directed linked to the "big game" of summative assessments, students find themselves more successful with those "big games." Also duly noted at this time was that these "big games" are in many different formats, giving students ample opportunities to demonstrate their learning in performance and authentic ways. Varying the format of summative assessments gives students extra opportunities to show academic achievement and mastery of the content and skills, which these participants considered valuable in the use of AfL.

One teacher explained that he had created an "optional assignment alternative" where students choose to complete the optional assignments, receiving an "excused' in

the gradebook rather than a zero." He explained that this puts students in charge of their own learning; however, he also added that this would not apply to all assignments, as all writing assignments, some classwork, and other mandatory state requirements must be met by all students. Referring to this optional homework policy on his syllabus, he explains that he expects students to make a decision for themselves whether they need to or want to do the homework, and "every time that a student can make a mature decision like that, not just doing it for the sake of someone is telling them to do it, but for their own value, then that would be social growth," alluding to the mission statement of our district. This teacher has located the impetus for learning within the student, and according to this teacher, the use of this optional assignment policy makes the completion of homework "non-threatening" in that it is a safe place for students to "make mistakes, learn from their mistakes without penalty, creating less anxiety and a comfortable learning atmosphere." Not only is this a shift towards a more cognitive view of learning, but a situative one as well since it makes the learning a much more social endeavor between the teacher and the students.

Pre-tests. Another strategy that serves as evidence that these teachers now perceive the impetus for learning to be within the student is use of pre- and post-tests. This is yet another example where the shift to a more cognitive and situative view of learning takes place. Teachers describe that by using the exact same exam, for example, and Advanced Placement (AP) English test, students are able to see and own their own growth in their learning. In the case of the AP English test, students were able to own

their improvements in their writing due to the "perpetual practice with the skills that are seen" by tracking their own skills.

This teacher shared the document that she has students use to track their own growth in the targeted skills, which in this case were the specific AP standards. The document that she provides students that tracks their "perpetual practice," as well as the "Standard Proficiency Report" which also shows the pre- and post- test on each AP standard and how the student has increased and performed on each standard. This initiative was new to this teacher this year in an attempt to go "beyond the grading" since AP courses must focus on skills, and this was an attempt to have the students actively involved in their progress of acquiring those skills necessary to be successful on the AP exam at the end of the school year.

These teachers use pre-tests in order to determine what students do and do not know, but not counting the pre-test for a grade. In this way, it is understood by students and teachers alike that some assessments are for learning, are graded differently, where there is no formal grade, but rather, through a clear understanding of AfL practices, just formative feedback for the students to own their learning for themselves.

This shows that this teacher, as an example, through her use of pre-tests now places the impetus for learning squarely within the students who are able to grow and track their growth for themselves. This is strong evidence of a cognitive and situative shift since the teacher and students are now working together through the learning and

assessment process, and is was made possible due to these teachers' understanding of AfL.

Teachers and Students on the Same Side of Learning

The second finding emerging through the teachers' understanding of AfL was that teachers now find themselves on the same side of learning, working together through the assessment process to increase and improve learning. Although this finding is evidence of a shift toward s a more cognitive approach to learning, it is overwhelmingly situative in that teachers and students are collaborating in the learning, making the learning and assessment process a much more social endeavor. This finding, where teachers now perceive themselves on the same "team" as students, developed through the teachers' understanding of the AfL strategies of: 1) Student Self-Assessment and 2) Formative feedback.

Self-assessment. Self-assessment is an AfL strategy that emerged from teacher understanding of AfL to show that students and teachers are now on the same team, working together to increase student learning and demonstrating a shift towards a more cognitive and situative view of learning.

AfL is clearly defined by a cycle of student self-assessment and teacher feedback, putting students and teachers on the same team towards learning. Teacher feedback allows the students to learn how to self-assess, instead of having to always rely on the teacher to determine how the learning was progressing. One participant likened AfL to

a gauge, either with student self-assessment or by teacher formative assessment, to see where students are in their learning, and then using those

formative assessments to guide instruction towards a bigger, summative assessment at the end of a unit.

The group agreed that self-assessment was an important part of the definition of AfL, since after students engaged in learning experiences, they were then allowed to reflect on the learning goals that they had set for themselves, and then decide what they were going to do to improve or change in order to meet that learning goal for next time, or by the time they are given a summative assessment on the same skill and/or content.

Self-assessment opportunities allow students to reflect on a mistake that was made and decide why they made it, and most importantly, how they will do better next time. If it is just one small portion that was incorrect, students being able to point out what it is and why, is very helpful for their learning. One teacher indicated that allowing students to determine for themselves what they do not know is "putting them in charge, which is my biggest advocating for AfL." The discussion continued with the idea that the use of self-assessment allows for the student to drive their own learning, which is what they are going to need when they leave high school and are required to be selfmotivated lifelong learners. This is a clear shift in thinking towards a much more cognitive view, with the impetus for learning within the student.

One teacher shared that she does "working-based critiques" as a type of selfassessment in the middle of a project so that students assess their own progress during the process, similar to being able to retake a test. She first thought that students would totally "blow off" doing a self-assessed draft of a paper, but she has not really seen that happen. Instead, students take advantage of the self-assessment opportunity to truly

improve their writing. She went on to explain how students who are willing to do the self-assessment process must be doing it for the learning since the process is very involved to be motivated by "just a point or two…it's got to be more about the next time they write, they don't make the same errors." Teachers having students self-assess have clearly located the impetus for learning to be within the student, a cognitivist idea consistent with the philosophies and strategies of AfL.

Many participants further agreed that self-assessment allowed for the student and teacher to be "on the same team" in that is provides for opportunities for students to take ownership of their learning and regard teachers as "academic coaches." As coaches, it was discussed, teachers are "ones directing the plays but the students are the ones on the field doing the work, but working towards the same goal." One group member went as far as to state that student self-assessment was the most significant change that she has made to her teaching since being part of the Assessment for Learning team for the past five years. By asking students to self-evaluate, students find "more value in the content and experience." Some of documents that this participant uses include probing questions such as, "What was the most challenging part of this event?" and "What did you feel was unnecessary or of little value?" Other thought provoking self-assessment questions asked of students during a classroom observation included, "What did you learn about children during this activity?" and "What was one improvement you found that you need to work on?" These types of questions require students to reflect on their own learning, and realize where their gaps are in their content knowledge, while teachers also see the gaps in their instruction as well. In this

way, student self-assessment not only serves as an important tool for student learning but as an important tool for teachers to assess their instruction.

Another teacher shared a rubric for students to do their own self-assessment, which provides a consistent reinforcement of "skill, skill, skill." Then throughout the year, students self-reflect on their progress on those skills as they progress towards the summative AP assessment at the end of the school year. This I was able to observe, particularly through the lens of Domain 3 of the Danielson model, as students were returned their rubrics with the feedback from the teacher on them, and then were instructed to self-assess on their "reflection chart," which was built in as part of the assessment rubric. They were then instructed to record how many they got correct and incorrect under each standard, and then on the backside of the document, next to the answer there is a place for reflection where they were asked to tell the teacher (and themselves) how they felt about the passage. Then they set goals for themselves for the next practice passage.

The teacher also shared that at the beginning of the year "students' reflections were sometimes just a number since all they were working towards was a higher score on the AP exam, but then I guided them to be more reflective about the goals and comments." Students reflecting and self-assessing their own learning progress in this manner is evidence that AfL has allowed for teachers to find the motivation and incentive for learning within the student, again showing that a shift has occurred to make learning more cognitivist and situative.

Formative feedback. This use of frequent, formative assessments as part of AfL strategies allows teachers and students to work together to start looking right away to figure out how the learning is going and where there are still learning gaps. In one classroom observation, I was able to see that as students were finishing up a lab experiment, the teacher asked them to stop right where they were to have "a little practice quiz" over the material they had just worked with in the lab. They students were reminded that the quiz would not be graded for points, but it was to be informational for both them and the teacher to "just see where we are." The teacher later explained that after a few of those practice guizzes, the students began to realize that the summative tests looked just like the practice quizzes, so they really began to take them seriously knowing that if they mastered those, then they would be successful on the summative assessments as well. He also explained that it took some students longer than others to figure that out, but by the end of the semester, he was able to give them a practice quiz and then put the answers on the board right afterward, yet they would still take the quiz seriously because "they know it is for their own benefit and in their best interest to do it." Teachers also discussed how the non-graded opportunities are only successful if they are followed up by frequent, descriptive feedback from the teacher, as well as self-assessment opportunities for the students. These strategies all put the ownership of learning directly on the students, facilitated by the teacher, clearly a shift towards both a more cognitive and situative approach to learning, driven by the assessment process.

Frequent, formative feedback was also addressed in the participants' documents provided, and was readily observed in the classroom setting. If homework and quizzes are formative, then they should be designed to give students valuable feedback on what material has and has not been mastered to that point. Feedback comments are sometimes encouraging, but sometimes they connect to other key information that is necessary for class. Other times feedback just communicates their preparations have value for several reasons or as summative preparation. One teacher described how after she breaks down learning tasks into smaller pieces, she will have students practice these smaller segments, and then provide feedback, with no grade, or "maybe use a 4-3-2-1 scale" so that the feedback can be useful for the student when he or she begins to put the pieces together towards a more comprehensive, summative assessment. Feedback from the teacher that is useful for the teacher places the onus for learning within the student, a cognitivist idea that is consistent with AfL.

Another teacher clearly defines formative assessment on her class syllabus given to all students and parents at the beginning of the school year: "Formative assessments are the work done for my class during the lesson cycle that is like 'the practice for the big game' (i.e. homework checks, class activities, quizzes), and it will receive feedback (not a grade) from me." By describing formative assessment to parents and students on this document in this manner shows her understanding of formative assessment as a learning process that involves students in the learning process of AfL.

During an observation, quizzes returned to the students during the class period contained corrections and suggestions for improvement but did not have grades on

them. Students were then observed to be reading the suggestions and correct the errors on the assessment. During yet another observation, students were looking at a certain classroom assignment, reading the feedback from the instructor, and looking to the textbook to correct the errors on their work. Both of these are examples of how formative assessments and frequent feedback work together as effective AfL strategies to involve students in the learning and assessment process and allow for students to "own" the responsibility for learning themselves.

The Learning Team teachers also described how frequent, descriptive feedback guides students to learn more since they are receiving the kind of feedback that lets them know where their learning gaps are in relation to the learning targets. One participant stated that among the formative assessment strategies that she has implemented, descriptive feedback on all assessments, rather than grades, particularly on the labs that the students participate in, has been the most beneficial for student learning in her classes: "Students now actually read and reflect on the comments on the lab reports instead of just looking at the grade and throwing the paper aside." This too was observed in her classroom, as students were returned a lab report from the previous day and spent several minutes reading over the lab, reading over the descriptive feedback from the teacher before being asked to self-assess their own progress towards the learning objectives that unit. Students were then able to use that feedback to plan the next steps in their learning, clear evidence that the motivation and impetus for learning now rests within the student through the use of these AfL strategies in the classroom. This ownership of the learning process by the student once

again shows that a shift has taken place to create a more cognitivist approach to learning and teaching.

Overall, learning team teachers seem to have a rich and diverse yet accurate understanding of AfL as shown through the overarching thematic findings that 1) the impetus for learning in now located within the student and 2) these teachers now find themselves on the same team as their students, working together towards increased student learning. Both of these findings are clear evidence that a shift has occurred towards a more cognitivist and situative approach to learning whereby students are more involved in their learning, and a more social understanding and approach to learning has taken place as well with teachers and students on the same team. These findings and understanding were demonstrated by the various changes that many of these teachers have made to their teaching practices and policies that are related to mastery learning and formative assessment.

Evaluation Question 2: Teacher Use of AfL

Evaluation Question 2 addressed how teachers have come to use the various classroom strategies associated with Assessment *for* Learning after participating in our Learning Team professional development program. By actually using AfL strategies in their teaching, teachers will have begun the theoretical shift from a traditional behaviorist-differentiationist view of learning to a more student-centered, cognitivesituative perspective. They will also close the "say-do" gap by demonstrating that they not only know and understand what AfL is, but they also have incorporated it into their teaching as part of the assessment process as well. By using the practices and

strategies of AfL, these teachers will have taken important strides towards the type of teaching, grounded in cognitive-situative theory, that AfL supports, as well as the type of teaching that the Danielson model rewards as well.

The findings pertaining to Evaluation Question 2 all stem from the variety of practices and strategies of formative assessment that disclose the teachers' overall use of formative assessment strategies in their teaching. By discussing their own personal use of Assessment *for* Learning strategies in their classrooms, two main ideas or findings developed through the commonly shared uses of AfL among the groups of teachers, both suggesting that shift towards a more cognitive and situative view of learning and assessment has occurred. These two major findings related to teacher use of AfL emerged from this evaluation: 1) teachers found themselves surrendering some of their control of student behaviors and 2) teachers have had to find or develop ways to accommodate traditional systems related to assessment.

Surrender of Control of Student Behavior

The first finding that developed through the teachers' use of AfL was that teachers found themselves having to give up or surrender the control that they once had over certain student behaviors. These behaviors such as homework completion or classroom participation show that student participation in the assessment process requires teachers to give up the kind of behavior control that traditional assessment supports. With AfL, students are no longer controlled by threats against their grades if they do not complete an assessment. Rather, students are given learning opportunities that correspond to and are supported by a summative assessment. As a much more

cognitive approach, teachers are now allowing for students to choose to engage in these practice opportunities for the sake of the learning, not the control the teacher has over the behavior through the use of points in a gradebook. This finding, where teachers now surrender their control over such student behavior, developed through the teachers' understanding of the AfL strategies of: 1) Non-graded Learning Opportunities and 2) Assessment Retakes.

Non-graded learning opportunities. The first formative assessment strategy that was evidence of teachers having to surrender their control over student behavior as a result of their implementation of AfL was allowing for opportunities for students to complete either non-graded or optional work. Non-graded learning opportunities, such as homework for practice, had become a prominent AfL strategy for many of these teachers that they had come to use in their teaching, and evidence towards a more cognitive-situative approach to assessment and learning. Teachers shared that they had come to believe that the purpose for assigning homework as practice, preparation for the next day or "alternative, long-term assignments that reinforce or enrich the learning going on in the class." They also discussed that they now perceive this homework as a "behavior" that they must no longer attempt to control, and instead, use homework and other non-graded assignment completion information as part of a participation grade or not at all.

One learning team teacher declared that at first implementation, students "are right off the bat like 'woo hoo, alright, we don't have to do homework,' but then they don't do very well on their first assessment, and that's a learning experience." After

that point, students appear to begin to understand that they are now in control of their own learning and success, and they should complete their non-graded assignments such as homework in order to learn and understand new concepts and skills. These teachers see that by surrendering the control over traditional academic behaviors such as homework completion, students became more invested in their own learning and success.

Teachers also noted that students at first discovered that optional non-graded assignments such as homework were more work, but then decided that putting in the time and effort were worth it in order to do well on the assessment the first time around since assessment retakes are often more work and more challenging. This again, put the control of the learning on the student since the learning opportunities were non-graded opportunities for students to learn and prepare for a summative assessment.

According to one class syllabus, in the section titled "Philosophy on Assessment and Grading," the teacher clearly communicates non-graded opportunities such as homework as "formative assessment progress" pertaining to each of the learning standards for any given unit, clearly linking the non-graded opportunities to corresponding learning standards. These non-graded opportunities for students is an example of how this teacher, who once attempted to control the student behavior of homework completion, is now releasing this control by allowing students to use these opportunities to practice for a summative assessment without any sort of behavior grade in the mix. She explained that this use of this strategy was a direct result of her

exposure to AfL through the learning teams for the past several years. One teacher even came to understand AfL to be "different from normal assessment in that it is more specific to the skills and knowledge that a student has learned, without being complicated or diluted with student behavior or task completion." With AfL, many of these teachers, by offering students non-graded learning opportunities have no need to control student behavior any longer, with students completing these non-graded opportunities for the learning and preparation that it provides for summative assessments in the future.

Teachers also shared that students' homework habits were improving with each unit of study. Teachers were beginning to notice positive changes in students, and most indicated that students were now doing homework, after the homework grading affects their first unit test. One teacher perceived there to be less "shut down" by students because with formative assessment, "there is always hope." Also, students were reported to complain less and understand that there are better reasons for homework than just points; it is about preparation for learning the next day. She also noticed more effort, in general, but formative assessment "is not the silver bullet," yet it does clarify the difference between student behavior and student achievement.

Teachers also discussed that through optional homework strategies like these, whereby teachers gave up control of certain student behaviors, students begin to see the value of homework for skills and knowledge, and not just points in the gradebook. Therefore, these teachers noted that students would put forth reasonable effort on their homework, even after they had explained that they no longer collect and grades

for that homework. Many teachers also found that students still did the homework when it served the purpose of learning and mastery, and most importantly, it is aligned to a summative assessment that the students are progressing towards. Per one teacher, if the "assignment is valuable to the student in terms of learning, then they do not need points to bribe them" to do the homework. This "bribe" was one way that teachers have traditionally attempted to control student behavior, in this case, homework completion.

These teachers also noted that by relinquishing their control over student behaviors such as homework completion, students seem to learn more and are rewarded for learning, not just completing homework, "however *that* gets done." One teacher stated, "Grades are earned because they learned." Teachers also discussed a similar sentiment when they discussed that a real benefit of AfL is that students clearly understand that the purpose of doing formative assessments, such as homework, is so that they can do well on the test. It was further commented that students now see formative assessments as practice for the "big game as opposed to lots of little minigames" where students "see the value of doing reinforcement homework...they learn more by doing homework which is evident by the higher grades on the assessments." By these teachers surrendering the control they once traditionally attempted to have over homework completion behavior, they now see students to be acquiring that power over themselves and using it to learn and achieve more.

Teachers also expressed that by teachers surrendering control over certain student academic behaviors, student motivation had been perceived to have improved,

especially in the area of non-graded learning opportunities such as homework completion. One teacher stated that most of his students were completing optional non-graded assignments for "the right reasons:" gaining knowledge and being eligible for the retake option after the summative assessment. He also mentioned that through his optional homework strategy, that gave the control to the students, "the bright, lazy student with the attitude is no longer hurt by it [not completing non-graded assignments]." In observing one teacher's class, it was evident when homework assignments were collected for that day, that the majority of the students were turning in their chapter outline, and were therefore willing to complete homework, and also earn test retakes, to extend their learning towards mastery. That same teacher's syllabus also provides the explanation that he is "hopeful this [optional homework and retakes] will improve student learning and motivation" by releasing the control he once had over homework completion behavior.

Another teacher stated that the "average" student's motivation seems to be improved as students now have control over their own academic behavior such as homework completion, stating, "there are always going to be kids who don't work, formative assessment or not."

While some teachers also claimed that the specific purposes for assigning nongraded opportunities for learning such as homework that had been adapted or modified based on their implementation of AFL, other teachers shared that they have completely revamped their expectations and policies regarding non-graded formative opportunities for students to master learning targets, such as homework. Although teachers were at

different levels of implementation with this AfL strategy, in both cases, the changes that the teachers made were examples of how these teachers had relinquished some of their control of student behavior in a way that made their approach to assessment and learning to be much more cognitive and situative in nature.

Assessment retakes. Another formative assessment strategy that required these teachers to surrender their control of student behavior was their use of assessment retakes or "re-dos." Some learning team members' passion for assessment retakes was evident as much of the discussion at this point revolved around this particular strategy and how it has transformed their teaching. On one syllabus, it was stated that, "students have the opportunity to re-correct many of the unit exams or quizzes." The purpose for this strategy is to further student learning, even beyond what was once considered a summative assessment. By allowing students to retake assessments, teachers are now recognizing that learning can and should go beyond an assessment that was once considered the end of learning. Teachers are giving up the control they once had on student behavior, requiring students to prepare for an assessment knowing that they only had one shot at it to be successful. However, not all teachers were as capable of giving up this power over students. For example, for one teacher, the part of his policy that he was most excited about is that for students to be eligible for the retake or re-correction option, students must complete the previously mentioned optional homework assignments. This was this teachers attempt to still control student behavior by bribing students with homework completion. This teacher has been yanked back into the traditional model of controlling student behavior with

some sort of reward for obeying the teacher's command, in this case, homework completion.

Another teacher's syllabus clearly explains to parents and students that "if a student does not choose to complete the optional homework, he/she will not be able to re-correct their test or quiz at the end of the chapter/unit." With this stipulation, the teacher explains that this is the part of AfL that he especially likes since the purpose of assessment retakes or corrections is mastery of content and/or skill, yet students must earn the retake opportunity: "The optional homework on its own would not be as valuable, and if I just did the corrections on its own it wouldn't be as valuable, but if you tie them together, one leads to the other." After the student earns the retake, he or she must then demonstrate the effort to get more assessment questions correct, therefore leading to further understanding of the content. And as "more time spent is often more time learned, students simply get more out of it," causing this to be a valuable instrument for improved student achievement. This teacher is attempting to surrender his control over student behavior by allowing students to earn a retake; however, in order to earn the assessment retake, the student must complete optional homework, a clear attempt to control the behavior of homework completion. This teacher, also, is headed in the right direction by releasing control of student behavior, but is still not fully embedded in the concept or at least compromising to light of teaching norms in high schools.

Other teachers who had implemented the retake strategy indicated that students are allowed opportunities to retake quizzes, putting the control in the

students' hands. However, before a retake can be administered, students must present the instructor with evidence of further learning such as quiz corrections, self-assessment documents, or outlining mistakes and what was done to correct or improve. This is fully surrendering control of student behavior, as students are now in control of their learning. Some teachers shared how they have gone one step further in the retake process by having students only retake questions on the objectives they have not mastered, and students do not have to retake an entire quiz unless they have not mastered any of the material.

In observing one teacher's classroom, while reviewing an assessment that was called a "quiz," several references were made to upcoming quiz retake opportunities both before and after school, as well as during students' advisory periods. Announcing these retake opportunities seemed to be routine in the classroom setting, and many students were writing notes down in their planners selecting retake opportunities to further their learning. This is further evidence that by offering assessment retakes, the control over learning has been shifted from the teacher to the student, showing a more cognitive and situative view of assessment and learning.

Generally speaking, these AfL learning team teachers seem to use AfL strategies as shown through the overarching thematic finding that through the implementation of AfL strategies, teachers must often surrender the control they once had with a traditional model of assessment over student academic behaviors. This finding as related to the use of AfL strategies is evidence that a shift has occurred towards a more cognitivist and situative approach to learning whereby students are more in control of

their learning, and a more social understanding and approach to learning has taken place since teachers must now influence students to learn and grow in other ways other than bribes or threats against their grades. These findings were demonstrated by the AfL strategies that these learning team teachers had implemented, namely non-graded opportunities for learning and assessment retakes, as part of their understanding and use of AfL in their teaching.

Accommodation of Present High School Traditions

The second finding that emerged through the teachers' use of AfL was that teachers found themselves having to accommodate for present, traditional high school traditions. These traditions such as grading and homework show that teachers have often had to come up with clever, creative ways to "massage the system" in order to implement AfL strategies in their teaching. By coming up with these accommodations, these teachers are attempting to take steps towards a more cognitive and situative approach to assessment and learning, when oftentimes they find themselves yanked back by outdated high school traditions and archaic assessment practices. This finding, where accommodations had to be made for outdated academic practices, emerged through the teachers' discussion of their value of AfL, and therefore requires new perceptions and accommodations of traditional views of: 1) grades; 2) classroom practice; 3) professional development; and 4) existing assessment systems.

Grades. One area where teachers needed to accommodate existing academic traditions was in the area of grades and the process of grading student performance. It was particularly interesting that in most cases, these teachers had a hard time

explaining or discussing AfL without making a connection to how it affects grades or the grading process. One teacher explained that formative assessment was defined by "making students motivated for more than just points...it's all about mastering the concepts." Conversations that were meant to discuss AfL and describe teachers' perceptions of AfL seemed to inevitably turn into a discussion on grading and the ways that AfL has influenced how they use assessments to communicate learning in their online gradebooks, their primary method of communicating student progress to parents in our district.

Grades are the very traditional markers for learning, so teachers and students both notice grades as one socially constructed measure of learning, making them significant to these teachers. One participant stated that in his opinion, "Grades are higher, and due to the increase in the completion of homework, which is rather ironic, test score percentages are also higher than in the past as well." Another factor that the group attributes to higher student achievement is the manner in which grades are reported. When assessments are categorized in such a way that approximately twothirds of a student's grade is determined by his/her performance on summative assessments only, this reinforces the idea that learning and mastery of concepts is the focus of the course – not homework completion or compliance-related behaviors, leading to significant improvements in student achievement.

Another teacher explained that with that optional assignments "would only benefit the student in studying, reviewing, and testing." In other words, the optional assignments would serve as formative assessments allowing for students to master the

learning objectives of the course without necessarily changing their grade if they choose to "opt out" of the assignment. He also added that according by using formative assessment practices, only students who completed the optional assignments are allowed to make test corrections on the summative exam, as this serves as motivation for assignment completion despite it not being worth "points."

Another area where teachers were required to massage or accommodate for existing academic traditions still related to grades, was in communicating their grades differently, using weighted grades. One teacher shared that she had made the switch to weighted grades after trying it out in summer school a few years ago. She shared that used to use "Total Points" but since she has been part of the AfL team, she has decided to go to weighted grades, apply them in all her classes. She commented that the weighted grades really show what the focus of the test or lab is, as opposed to all the small assignments that might be considered check points along the way to the test or lab. Through weighted grades, students know that it is

their responsibility to know the content by the time it is on the test, which is worth at least 50% of their grade. So even if they are doing all their homework along the way, it does not necessarily mean that they are going to get mastery grades since the weights are 50% tests, 30% labs, 15% quizzes, and 15% assignments. The tests and labs make up 80% of the grade since that is the heart of the course, which also minimizes the homework influence on grades since no one exactly knows if it gets done with care and integrity.

During the discussion, many of the teachers to share how their grading weights

and percentages had changed due to their understanding of AfL, influencing them to switch grading weights to reflect the mastery of standards instead of completion of assignments. From the gradebook sheet that was submitted to me for analysis, it was clear that by using different categories with different weights, the teachers could make sure that mastery of learning targets on summative assessments were the most heavily weighted assessments in students' grades reports.

One teacher said that she had made this change to be sure that her grades were "skill-based, versus effort-based." Another stated that she does not weight her grades; however, there are many opportunities for revisions and rewrites which then end up in the gradebook. One teacher shared that she had been nervous about the weighting breakdown since she shared that she herself had never really been a great test taker, so she was concerned that many student like her would be intimidated by it. However, she then shared that she found that the weights on the grades is

really pushing them to really know the material, and there's no more, hey, I can bomb this test and still pass the class, because I do well on labs and do all my homework' since that's not the point of the class. The point is, did students meet the learning objectives in the end?

However, not all teachers were at this same level of change for different reasons, with different levels of how AfL can and should influence how teachers report student progress.

Another participant shared that her department decided that "mastery" would be 90% for the safety proficiency exam that all students must pass before moving on to science lab work. This department also created its own weighing system for grades, so that students across the district would have the same experience no matter who their teacher was or at what campus the class was taught. She also added that she had students who told her that they had never had a 90 on a test before, and she replied that she told the students "that they would study, and play review games, and practice and do whatever it takes to get you there." It was then discussed that mastery can always be set at 70% or 80%, but to our department, considering it was a safety proficiency test, that department thought 90% to be most appropriate as department policy.

One teacher objected to the amended policies due to his understanding of AfL.

He believes that

there should be a separation of AfL structures and proposed grading structures. They kind of get lumped together for some reason, like no zeroes, but they are different. They are two entirely different things, and one of these I buy into, and one I do not. So AfL is not necessarily about a grading change; it's just a change in how to work the grading into the class and not how you assign grades to students."

This participant has come to his own clear understanding of AfL, separating the amended grading practices that are often associated with AfL practices. And yet another participant shared that she felt that the grading angle of AfL can be challenging and intimidating, which is why she had "tried it out with summer school first."

Teachers also debated whether the AfL practices as they relate to student grades should be district policy, whether it be by department, school, or district decision. Some argued that practicing AfL should be the teacher's discretion, while others felt that departments should decide on policy based in AfL so that when students go from class to class within the same department, there is consistency in the grading policies. This prevents students earning different grades for the "same amount of knowledge depending on the teacher's personal policies in the classroom." It was also mentioned that with a new evaluation system on the horizon, problems with program coherence could arise if everyone grades differently, or if some teachers allot more high grades than others, or even if some assign higher value to tests or give varying tests with different performance tasks or questions.

Grades were the first example of how these teachers had to find ways to accommodate for and even massage present, outdated, traditional academic practices in order to implement AfL concepts and practices in their teaching. These accommodations, however, in grading bring teachers closer to a more cognitivesituative approach to learning where teachers and students work together in the assessment process.

Classroom practices. Another area where teachers found the need to accommodate for existing, traditional practices was in their present classroom practices based on their value of AfL. Teachers, in their discussion of how they value AfL, explained the particular changes they had made to their teaching based on their understanding and value of AfL. These accommodations or changes to present, traditional practices demonstrate that these teachers did not stop at understanding AfL; they made real changes in their work. These changes or renewed approaches influenced how teachers approached homework and used "Check Points" in their classroom practices.

All of the groups stated in some way that one of the major policy or practices changes is that, with formative assessment, homework no longer – or very minimally-"counts" in their students' grades anymore; rather, homework is now intended to be a "safe place to practice and grow towards the learning targets."

In looking at this teacher' gradebook page that she had submitted to me for document analysis, she shared that she used to grade homework and even had a category in her grades whereby students would accumulate homework points. Since the implementation of formative assessment in her teaching, homework is no longer a category in her grades, and homework is returned to students with "feedback only, with no more point issues." This teacher went on to explain that before she changed this grading practice, students used to argue over small numbers of points in the gradebook. Those arguments no longer exist as students clearly know that only summative assessments will be entered into the gradebook, ending the "chronic grade grubbing."

Another way that some of these teachers had made accommodations or changes in their practice based on their understanding of AfL was by having "check points" instead of grades with the purpose of making sure that students have accomplished the skill or knowledge check before they are allowed to move on to the next learning target or objective. This check point concept was one that I was able to observe in an Art class that I visited, where the teacher was assessing value skills. In this particular class, the students were to create nine different values before they could move on to shade forms. Students were not allowed to move on until they had proven proficiency in the assessed skill, which was needed to work towards the final project for the class.

Professional development. Teachers cite the professional development from our own school district as another area that needed to be perceived differently as a result of how teachers had come to value AfL. The Learning Team approach to professional development was an unconventional alternative to the traditional "sit and

get" model of PD that many teachers had been used to in our district. Many teachers not only discussed the influence that the Learning Team approach had on them in terms of coming to understand AfL, but also that the district respected their professionalism to allow this program to guide them through on their own. By allowing these teachers to experiment with formative assessment and reflect on their active research with their colleagues on the learning team, this was another example of how we had massaged the professional development traditions of our district.

Teachers agreed that the grassroots professional development efforts of our district, and most influentially, the Learning Teams themselves were a different, innovative approach to professional development that allowed teachers to approach the AfL strategies on their terms. One teacher shared that the Learning Team approach influenced her to experiment, even though "some of the stuff I had been doing with my students before it was called AfL." Teachers also shared how the AfL process all seemed very logical, but then when they were involved with the Learning Team, they agreed that when they saw and heard about what other people were doing, then they were able to add little "tweaks" or other small changes on how to approach it or even just how to talk to the students about it. And they also discussed that students were "getting better at it" because they were beginning to see the process in more than one teacher's classroom. When students began to see similar processes in other classrooms, it began to get easier since they are seeing the same AfL strategies throughout their day.

With a renewed vision of professional development, teachers also discussed that the overall team approach "worked wonderfully" to get it started, as it does not seem

dictated or heavy handed, and depending on how old you are, sometimes you don't like somebody moving your cheese, so then it's a way to open the door to get involved without feeling like they are being forced to employ a certain strategy in a realistic sort of way, and decide for themselves if it's a good or bad idea, and just like we want to bring our students into their own education, it works well for teachers too, where you want to bring them in, where you are persuading them in certain ways, instead of telling them they need to do it. The same approach works well for teachers too.

This teacher particularly has gained some insight into not only the way that AfL draws students into the learning process, but then has made the leap to understand that the Learning Team approach is grounded in the same learning theory that works equally effectively for teachers and students alike.

Also part of the discussion on the Learning Team approach was the appreciation for the "gradual immersion so that teachers did not balk at everything changing at once." Over the course of five years, it has been very gradual instead of "dumping a bucket of cold water on them" and telling teachers to change everything in order to buy into this new philosophy; rather, it has been gradually growing team members and department members instead of having to wake up one day having to just understand and do AfL. They also appreciated that at the beginning, their building leaders embraced the concept of AfL and opened up dialogue to challenge any part of it and never seemed to mind if there was disagreement. In fact, it was a positive and effective way to communicate a new system or change because he was always willing to sit and chat. It was also discussed that they group appreciated that none of the leadership would demand what had to be done or adopted, but rather they would just explain the philosophy behind the AfL strategy.

The discussion also included the benefit of Learning Team members bringing back information from AfL team meetings to department meetings so the rest of the department can hear updates and information pertaining to AfL strategies and philosophies. In fact, the group came to the decision through discussion that the departmental representation by one member of the department in the AfL team seemed to be a beneficial use of people's time since teachers are all so busy, and not everyone can make all the meetings, "but when you sit down to lunch, you can rehash the discussion from the most recent meeting." Teachers did indicate that they did have difficult and defensive conversations from time to time.

In discussing the AfL team meetings themselves, it was shared that the best meetings were those that had some structure and even something controversial, since that "is what gets people's blood flowing, people talking, and your mind working." They seemed to be collectively appreciative that they were not just sitting there at the meeting listening to someone talking. And so when they would discuss what other districts were doing, they would have an appreciation for understanding that "you learn just as much from what does not work than what does sometimes," and there was always something to take away from the discussion, especially when our district now knows what not to do, especially moving forward. These teachers were truly engaged in real collaboration, looking towards the next steps in their own learning process.

However, the Learning Team teachers clearly agreed that the greatest challenge to approaching professional development in this manner was that AfL is, or was, "new," "a change in thinking" and "very different from what they were used to." It was most

overwhelmingly agreed that challenges arises from it being a "new philosophy, and it was like moving their cheese." The Learning Team approach was another example of how teachers had massaged or accommodated academic traditions though the discussion of how they had come to value AfL in their teaching.

Existing assessment systems. Further evidence that these teachers have had to accommodate or manipulate the academic traditions was because of the way many different groups of people perceive AfL and how it deliberately deviates from existing assessment systems. For example, the Learning Team teachers discussed how students do not really understand that they are not necessarily always going to get a grade for an assessment, as it still seems pretty ingrained in tradition that they feel that they are doing assignments to get grades, not for the learning. One of the many challenges was that it takes a while for students, and even parents, to see past the concept of "points," and understand that certain assessments and homework are for learning and not just points in a gradebook.

One teacher shared that she felt that she had gotten better at explaining how the assessment steps build on one another, and why she, as the teacher, was doing it that way, and why they are not allowed to move on until they master the previous step. She went on to explain that students do not always see the value in the smaller steps, until they get to the final project or assessment. This is usually when students gain a better understanding of AfL as a process, and are then more motivated to work on their formative learning much more than they had before the summative assessment. But the fact that the teacher had to go to great lengths to get students to understand and

value her new assessment system based on AfL is yet another example of how the present system had to be massaged or manipulated for students who were used to old model. This is an obstacle for our teachers in their implementation of AfL and a hindrance in a true shift to a more cognitive-situative view of learning and assessment.

An additional challenge that our teachers faced in accommodating for outdated, traditional assessment systems to use AfL stemmed from our neighboring districts, both grade school feeders and neighboring high schools, having attempted to put policy in place in the name of AfL when it was not fully understood and therefore, not implemented with integrity or buy-in. Therefore, some of the challenges arose in our district with fear of similar policy being imposed on the teachers of our district without understanding or buy-in of the AfL philosophies and strategies. One teacher shared

Our building leaders, once again, were particularly good at explaining the philosophies behind what the other schools were doing, but then also stifling the fears that our district would be similarly imposing AfL policy. The other district's policies, it was decided, did give the negative Nellys something to push back against AfL, but honestly, it was discussed that they might be resistant to any change at all. And so participants found it disappointing when other teachers would only listen to the rumors about what the other schools were doing instead of having an open mind to what our district was attempting.

It was decided by teacher that there are "just some people who do not want change," and were therefore looking for excuses not to change. Another similar concern was from the Learning Team teachers overhearing comments from other teachers like, "I just wish they would tell us what to do or just stop giving us all this information." These Learning Team teachers then concluded that there will always be those teachers who simply resist change in anything, despite what they learn is best for students, that there are those who know it is probably a better way to reach students, but they simply will not change now. This was yet another example of how these Learning Team teachers had to accommodate for and manipulate the existing traditional academic systems of beliefs.

Overall, teachers oftentimes found themselves having to "massage" the existing system of learning and assessment in order to implement AfL in their teaching. These accommodations and challenges discussed by these teachers all stemmed from some teachers, students, and parents not being able to get past the outdated traditions of present high school assessment systems. Learning team teachers found themselves having to acclimate students and parents to the AfL practices where cognitive and situative changes had taken place in their teaching. These teachers also found that the Learning Team approach to staff development was also an example of how present traditions, like the sit and get professional development model, needed to be revised and manipulated as well. In order to successfully shift from a behaviorist-differentiationist model of teaching and learning, many aspects of the traditional high school needed to be accommodated or manipulated in order to shift to a more cognitive-situative model, where AfL exists to improve student achievement.

Evaluation Question 3: Teacher Value of AfL

Evaluation Question 3 addressed how teachers have come to value Assessment for Learning after participating in our Learning Team professional development program. By using AfL strategies in their teaching, teachers will have begun the theoretical shift from a traditional behaviorist-differentiationist view of learning to a more student-centered, cognitive-situative perspective; by coming to actually value how

AfL has impacted their teaching and student learning, the shift will be more complete, as they continue to close the "say-do" gap by demonstrating that they not only did the learning team teachers understand what AfL is and incorporated it into their teaching, but they also see the value that AfL has for students and teachers. By coming to value the principles and practices of AfL, these teachers will have taken important advances towards the type of teaching, based in cognitive-situative theory, that AfL supports and demands.

The findings pertaining to Evaluation Question 3 all stem from how teachers have come to value AfL that disclose the teachers' overall use of formative assessment strategies in their teaching. By discussing their own understanding and use of Assessment *for* Learning strategies in their classrooms, one major finding developed among the groups of teachers, suggesting that a shift towards a more cognitive and situative view of learning and assessment has occurred. Although there were different levels of value towards AfL, most of these Learning Team teachers had embedded AfL strategies into their teaching and found that those strategies were part of what good, effective teaching truly is. Therefore, the major finding related to teacher value of AfL is that: AfL, made up of variety of concepts and strategies that involve students in the learning and assessment process, is now accepted and regarded as part of what is considered good, effective teaching as shown through the concepts of: 1)Learning Standards/Objectives; 2) Frequent Feedback; 3) Differentiation; and 4) Curriculum Prioritization.

AfL as Part of Good Teaching

The major finding stemming from Evaluation Question 3 pertains to how teachers have come to value the use of AfL strategies in their teaching. With the use of learning objectives, feedback and other approaches to communicating about student learning with students and parents, the major finding emerged was that teachers began to think of assessment as part of good teaching, particularly through the lens Danielson model, and not as an add-on or something separate. By perceiving AfL to be simply a part of what effective teaching is, these teachers have made a shift to a more studentcentered, social perspective of teaching and learning. Teachers who perceive AfL to be part of what is now considered good, effective teaching have come to use the strategies of: 1) Learning Standards/Objective;, 2) Frequent Feedback; 3) Differentiation; and 4) Curriculum Prioritization.

Learning standards/objectives. One example of how these Learning Team teachers have come to perceive AfL to be part of good, effective teaching and not a separate act is through the use of Learning Objectives or learning standards in their teaching. Teachers described an important part of AfL as identifying the skill or content targets that students are supposed to learn, and breaking down those skills into "building blocks" or learning objectives with each skill or content building upon each other before ever completing a larger product. This seemed to be a common idea with examples of breaking down large amounts into smaller pieces or "chunks, " and having students prove proficiency in these smaller pieces before students move on to a bigger,

more high stakes, assessment such as the unit test, semester final exam or even the ACT.

Teachers found it difficult to even discuss AfL without relating it to the use of learning targets or objectives that are communicated to students in various ways, showing that these teachers have embedded this AfL as part of their teaching, and not something separate or extra. One teacher began by stating that when she thinks of AfL, she immediately thinks of

Learning targets because you can't have assessment *for* learning without learning targets because you need to have that focus, that clear identification by the teacher, of what the targets are at the outset and how the questions on the assessment are aligning with that skill, and then how to determine how the students are performing on them.

The course syllabus that another teacher had shared clearly explained that using AfL "is an effort to not penalize students for imperfect practice (homework) and to give them [students] immediate, frequent feedback...so that they understand what they have not mastered and what to do to correct it – all without penalty being given in the form of a lower grade." Teachers agreed that AfL was all about finding out where the student is at in relation to the learning objective based on skills and content, determining where you want him/her to be, and then figuring out how to get him or her there.

Teachers also revealed that sharing and communicating what the learning standards were by way of "learning targets" or "learning objectives" for each class was the foundation for AfL to be successful, and has become deeply engrained in the teaching and learning process as a part of what effective teaching is. One teacher's syllabus states that students will "know precisely what is on every test and quiz before they are given," very clearly communicating what the standards for success are to the student. Teachers also discussed that their class units are now designed to have specific learning standards, and these standards are the basis for summative assessments. In observing one participant's class, and using the Danielson Domain 3 evaluation rubric as the lens, I observed that the learning standards, in the form of "I Can" statements were prominent at the front of the room on the whiteboard. I also observed the teacher announce and clarify what the learning targets were for that day at the beginning of the class period, and then conclude class by having students reread the objectives as closure, proving that this AfL strategy now seems to be part of the fabric of her class.

Another Learning Team teacher's syllabus explains that "assessments are described by learning objectives to communicate what is to be learned" and in explaining the document, this teacher stated that her learning objectives are clearly communicated at the beginning of every class period so that students "know why they are there" that day in class.

As further evidence of AfL being a set of practices used as part of good teaching, these Learning Team teachers explained that learning targets are best revealed at the "beginning of every unit as well as the beginning of every day" so that students are aware of what they must master by the unit test. These "target objectives" are what are communicated with parents and students, particularly on the effort and progress towards said objectives for the assignments. One participant shared that in having a

system for communicating progress towards learning targets, he communicates to

parents and students on his class syllabus:

Quiz questions will be grouped by objective and students will receive a rating (1-4) based on their work and answers to the questions on that objective. A score of 3-4 shows mastery of that objective. A score of 1-2 on any objective shows lack of mastery of that content, and those objectives must be mastered at the 3-4 level in order for students to take the unit test that covers those topics.

By asking the teachers about the practices and strategies associated with AfL, learning

standards or objectives were always first discussed as the basis or foundation for any of

the other strategies practices associated with AfL.

One teacher describes how AfL has changed how she teaches by having an

"honest set of objectives" that lead up to the summative assessments of knowledge and

skills acquired. Students

practice what they are doing through reading novels and writing, all leading to a summative final exam, making the clear connection that what they are practicing during the semester really prepares them for a final exam that summatively evaluates student learning.

Therefore, the teaching with AfL strategies is more deliberate on her part in order to

have students achieve at higher levels, all a part of what good, effective teaching is all

about, particularly through the lens of the Danielson model.

Lincoln-Way Learning Team teachers implied that AfL is part of good, effective

teaching by having these clear learning objectives for the students, and then ample,

non-graded opportunities to master those objectives. Teachers also commented that

AfL is defined by students demonstrating their knowledge and skill in various ways,

rather than always "tested." This was demonstrated by a class visit where students'

learning goal was to measure something accurately, and the teacher was able to walk from lab station to lab station observing and assessing this skill during class. In this manner, students were evaluated on this skill, making sure that they mastered it, with an assessment that was appropriate for the learning task. The teacher was then able to quickly find out which students did or did not have mastery with that learning objective, allowing the teacher to plan for corrective and enrichment activities the next day. According to the Danielson model, good effective teaching includes communicating expectations for learning as described in Domain 3a. These teachers realize that AfL supports the communication of learning objectives with students since it is one of the foundational strategies of AfL and is therefore simply part of good, effective teaching. This value of AfL, as shown through the use of AfL, is evidence that a shift has taken place towards a more student-centered, cognitive view of teaching, learning, and assessment.

Frequent feedback. Another AfL strategy that these teachers have embedded into their teaching as evidence that AfL is all about good, effective teaching is the use of frequent feedback from teachers to students. Teachers confirmed that AfL is driven and defined by the frequent feedback from the teacher given to students about their understanding of content and mastery of skills. One teacher explained that for him, an important part of AfL is allowing for corrections on assessments in order for students to achieve mastery of learning objectives. He communicates this strategy on his course syllabus by listing "frequent assessments" as part of his teaching practice and course

description, showing that he will be involving students in the assessment and learning process.

Frequent feedback was defined by one teacher as using formative assessments to build and assess student skills well before a summative assessment occurs. These teachers described formative assessment as the use of frequent assessments towards the mastery of learning objectives. On another Learning Team teacher's syllabus, "frequent feedback in the form of quizzes, homework, self-assessments, and teacher generated assessments" make it clear that feedback is essential to teaching and learning processes. Another syllabus clearly states that "formative assessments... will receive feedback and not a grade" from the teacher. She then clearly explains that "the student is instructed to use the feedback to take advantage of the opportunity to learn from mistakes and shortcomings in order to revise his/her assignment at the lesson goes on."

Another way teachers have now come to embed frequent feedback as part of what is good, effective teaching is through student self-assessment. By students providing themselves feedback through self-assessment, students, parent, and teachers see how the students' part in the assessment process is an important part of what is now considered good, effective teaching. On one participant's class syllabus, he explains the self-assessment strategy to parents and students as, it "allows students to assess their ability to master the topics, progress on the next assessment, and make adjustments accordingly." It is also clearly stated that the purpose for some of the projects, discussions, and assignments in class is for student to be able to "gauge where

they're at" in their mastering of the learning targets. Students are also expected to complete a document for self-assessment in order

to tell me why they got that question wrong and do a self-assessment portion to admit if it was something that they should have had or maybe there was something within the teaching that I did that confused them, and of course that is invaluable information for a teacher to know.

Teachers use student self-assessment as much as for their own instructional gaps as students can for detecting their learning gaps.

Although not every teacher was at the same level of value when it came to this feedback strategy, most of the Learning Team teachers did understand frequent feedback as using "building blocks towards something bigger" and value it as now as an important and impactful part of their teaching. In this way, their use frequent feedback from practice quizzes or informal non-graded assessments that are structured identically to the future summative assessment provides students with multiple learning opportunities. These formative assessments have the same language and with a lot of similarities as the summative assessment, but not the same questions, given in "shorter bursts," so that quizzes can be completed quickly. In this way, teachers can check formatively for learning that is transferred or used in different ways and contexts.

By these teachers embedding frequent feedback into their teaching shows that these teachers have begun to see AfL as a part of the teaching and learning process, rather than something extra or separate to add to their teaching routine. AfL strategies are meant to part of the fabric of teaching and learning, and while there were some teachers at different levels of understanding and implementation, many of these

Learning Team teachers had come to value AfL as part of what good, effective teaching is all about.

Differentiation. Not only does AfL ensure opportunities for frequent feedback, it also provides the framework and the guidance for student learning, but also provides opportunities for the teacher to differentiate so that teachers are responsive to distinctive learning needs for students. Although there were different levels of use and understanding of how AfL provides opportunities for differentiation, many of these Learning Team teachers came to value AfL as part of what is good, effective teaching. One teacher shared that using formative assessments in the form of practice quizzes allowed for him to diagnose different learning gaps in students and differentiate the next steps for each student:

With a practice quiz, one student was having difficulties with the language and vocabulary of the questions of the quiz, but yet another student was struggling with the algebra skills that the quiz required. So now I know what I need to work on with each of these students, which he would not have otherwise known if he had not been using AfL strategies in his teaching.

By using a formative assessment, this teacher and his students can both diagnose student deficiencies in the learning, and then teachers are able to help each student with what they need help with, instead of just taking all the students "through all the problems all the time."

Teachers also shared that AfL strategies allows for learning to be self-paced for students, so that when students far excel others, and there are yet other students with no content schema, AfL allows the advanced student the ability to move on and not lose interest while others keep working at it. Less experienced students still progress, but at different paces, and that is perfectly fine, as it allows the teacher to pinpoint their weaknesses so they can get extra support, since some are stronger when they present, for example, while others are better on paper. And so with AfL, it is acceptable either way since mastery can be demonstrated in many different assessment formats, including authentic assessment opportunities. By differentiating the instruction and learning in this manner, teachers have come to realize that AfL is part of what is considered good, effective teaching, particularly when measured against Danielson's framework for effective teaching.

Also a part of good, effective teaching, the use of pre-tests was also discussed by these teachers as opportunities to provide them with information and an idea of where students are in their learning at the beginning of a unit, an important diagnostic tool in differentiation. Using this type of assessment then gives students opportunities to selfassess their own progress during the unit, working towards a post-test, and teachers the opportunity to use correctives and enrichments for differentiation. These teachers also shared how they considered this new practice of pre-testing was a way to "get a gauge" of where students are, whether that's for students' or teachers' purpose or both, and then seeing the growth. Although Learning Team teachers were at different levels of implementation of pre-tests in their teaching, pre-tests, as part of the AfL process seemed for some to be an integral piece in differentiating instruction for students, an important part of good, effective teaching.

Yet another integral piece of differentiation as part of good, effective teaching is the opportunity for students to retake assessments in order to demonstrate further

learning. One Learning Team teacher shared that her retake policy stems from her new practice of using pre-tests where students are required to pass it with 90% proficiency before being able to proceed in the course and participate in the labs that require the base knowledge and skill that is tested by the pre-test. So students are required to retake this test, or specific parts or different versions of the test, until they can show their 90% proficiency, at times delaying their progress in class until the skills and knowledge is mastered, "because you can't cook until you know how to use a knife properly or you don't burn yourself, or if there's a fire in the lab, students need to know what to do." Using pre-tests and retakes both allow for students to be involved in the learning and assessment process, the very essence of AfL and what is now considered good, effective teaching by these teachers.

Curriculum prioritization. The last part of the finding that AfL is now considered part of good, effective teaching by these Learning Team teachers that was AfL allows for and requires teachers to prioritize their curriculum. Teachers discussed was that AfL really helps them to focus and decide what it is they really want students to learn, helping pare down what types of assessments and activities will help them get to that final goal. It has also helped to better explain to students the curriculum expectations of them, the expectations they should have for themselves, and what they can expect to get out of the class. In this way, AfL has also helped in setting the curricular standards and objectives and giving students feedback that tells them where their performance is in relation to the curricular standards. According to these teachers, AfL allows for their own self-assessment and the opportunity to to prioritize the content and skills that they

are teaching to focus on what students really need to know, "…Instead of little stuff that kind of makes up the big picture. Because if they can't get the big picture, and they can't remember, how is any of it going to help them in real life?" Curriculum prioritization, in the wake of CCSS and NGSS, is a challenge that AfL and student assessment evidence can support. It is a challenge that teachers will increasingly face with the ongoing development of learning standards from both CCSS and NGSS, and a vital part of what these teachers have now come to value as part of good, effective teaching.

In conclusion, by discussing how teachers value AfL, it was revealed that teachers who have come to understand and use the strategies of: 1) Learning Standards/Objectives; 2) Frequent Feedback; 3) Differentiation; and 4) Curriculum Prioritization now perceive AfL to be part of what is considered good, effective teaching and not as a separate part of teaching. Although these teachers are not all at the same level of understanding, use, or value of AfL for a variety of reasons, this finding can still be considered further evidence that AfL and our Learning Team approach has guided teachers to shift to more student-centered, cognitive approach to learning and assessment.

Summary

This chapter examined the three research questions regarding teachers' understanding, use, and value of AfL by secondary educators who have participated in formative assessment professional development for the last five years. The research questions revealed findings giving further insight into the strength of AfL to improve student achievement. By asking Learning Team teachers how they have come to

understand, use, and value AfL in their own teaching, significant findings developed as related to the evaluation questions to show that a shift has occurred towards a more student-centered, cognitive-situative perspective of learning. Through the exploration of Evaluation Question 1 related to the understanding of AfL, these major findings emerged: 1) teachers now locate the impetus for learning within the student and 2) teachers now find themselves on the same team with students in the learning process. Evaluation Question 2 pertaining to teacher use of AfL resulted in these findings: 3) teachers now surrender control of certain student behaviors and 4) teachers must often accommodate for high school traditions. And through Evaluation Question 3, related to the attributed value teachers place on AfL, it was discovered that: 5) teachers now regard the formative assessment process as part of good, effective teaching. The next chapter, therefore, will be a synthesis of the purpose, literature review, as well as this chapter's analysis of findings, implications and recommendations as to what should happen next in our district as a result of this program evaluation.

CHAPTER V

OVERVIEW, FINDINGS, IMPLICATIONS, AND CONCLUSIONS

This chapter includes an overview of the program evaluation that was conducted to describe how Lincoln-Way District 210 teachers had come to use, understand, and value AfL after having participated in a professional development program focused on AfL for the past five years. Our professional development program was a system where teachers engaged in professional learning communities we called Learning Teams. These Learning Teams were challenged with the goal of understanding and using AfL in their teaching while still accommodating for the norms and traditions of practice in a suburban high school. It was our district's commitment and intent that through these Learning Teams that these teachers came to understand, use, and value AfL, resulting in the shift to a more student-centered, cognitivist and situativist view of learning.

By asking Learning Team teachers how they have come to understand, use, and value AfL in their own teaching, significant findings developed as related to the evaluation questions to show that this shift has occurred towards a more student-centered, cognitive-situative perspective of teaching and learning. Through the exploration of the three evaluation questions related to the understanding, use, and value of AfL, these major findings emerged: 1) teachers now locate the impetus for learning within the student; 2) teachers now find themselves on the same team with students in the learning process; 3) teachers now surrender control of certain student

behaviors; 4) teachers must often accommodate for high school traditions; and 5) teachers now regard the formative assessment process as part of good, effective teaching.

Discussion of the findings, conclusions and implications of the evaluation are also given in this chapter. And because the results of this program evaluation are promising, implications and recommendations for my district moving forward with our Assessment *for* Learning professional development program are included as well.

Overview of the Evaluation

Teachers who adopt AfL philosophies and implement formative assessment strategies not only make the shift from a behaviorist-differentiationist to cognitivesituative view of teaching, learning and assessment but they also increase student achievement, most notably with struggling learners (Black & Wiliam, 1998; Chappuis, 2006; Greeno, et al., 1996; Popham, 2008; Stiggins, 2005). When students are given opportunities in classrooms to practice formative assessment strategies including clear learning targets, examples of exemplary work, frequent feedback, and opportunities for revision and self-assessment, these students are more successful in their learning (Marzano & Pickering, 2007; Stiggins, 2002; Stiggins, 2005). The results of this evaluation support the research that states that AfL makes a positive difference on student achievement but not without some challenges with its acceptance and coherent implementation (Stiggins, 2005).

Formative assessments are considered safe ways to attempt or practice new knowledge and skills without penalty, and are considered evidence of how the student

is progressing towards learning targets (Chappuis, 2006; Christopher, 2008; Cooper, 2006; Cooper & Valentine, 2001). Teachers who implement formative assessment practices not only improve student achievement and motivate students to learn, but they also transform how teachers provide feedback to students and report achievement (Heitzmann, 2007; Kohn, 2006; O'Connor, 2007; Pasi, 2006). Because of AfL's potential for increased student achievement, especially for struggling learners, and potential for having teachers make the shift from a behaviorist-differentiationist to a cognitivesituative view of learning and assessment, Lincoln-Way District 210 initiated a professional development program that heavily relied on Learning Teams in each of the four buildings. Through these Learning Teams, teachers were able to study, share, and reflect on formative assessment strategies that they were implementing in their teaching. Therefore, this program evaluation sought to examine the perceptions of secondary teachers who have participated in this AfL professional development program to determine how these teachers had come to understand, use, and value AfL.

Purpose of the Evaluation

The purpose of this program evaluation was to explore the perceptions of secondary teachers who had been part of AfL Learning Teams as part of a professional development program as an initial step in evaluating implementation. It had been our hope that teachers had made theoretical and practical shifts as made evident in their classroom practices based on the Learning Team AfL professional development program. This evaluation, therefore, intended to determine if that shift had effectively taken place, not only in the teachers' understanding of AfL, but more importantly in

their practice. And if teachers had chosen to use formative assessment strategies in their classrooms, then the evaluation goes on to further determine if they had come to value these practices as well.

More specifically, this program evaluation is not only intended to evaluate how these teachers had come to understand, use, and value AfL, but also to determine if the program had caused a theoretical shift from a cognitive-differentiationist view of teaching, learning, and assessment to a more behaviorist-situative perspective. Through this evaluation I intend to be able to make decisions for the future of the program based on the results of the evaluation, particularly since the true purpose of any program evaluation is to "provide useful information for future decision-making" (Stufflebeam, 1983, p. 120). This program evaluation revealed the understanding that teachers have of AfL, what specific formative assessment practices teachers are using in their classrooms, and then explored the value that teachers place on the use of these formative assessment strategies in their teaching. These perceptions (i.e. understanding, use, and value) are initial proxies for implementation that also provide important clues about the structures, processes, and culturally and socially mediated interpretations that enhance the chances that AfL will be adopted and fully implemented in the highs school setting. My summary of findings, as shown through teachers' understanding, use, and attributed value of AfL is shared here.

Discussion of Findings

The findings from this program evaluation all emerged from what I've discovered from the teachers' understanding, use, and attributed value of AfL are derived from the

AfL program that these teachers have all participated in for the last five years. By asking these Learning Team teachers how they have come to understand, use, and value AfL in their own teaching, several significant findings emerged from the evaluation questions to illustrate that shifts have occurred, in different levels and for a variety of reasons, towards a more cognitive-situative perspective of learning. These Learning Team teachers are varied in their shifts towards this more student-centered view of teaching, primarily due to the need to accommodate for the norms of the traditional high school where they are consistently yanked back towards these outdated assessment and teaching customs. Even with these pioneering teachers' struggle of making this real paradigm shift work in an unshifted high school setting, the learning that these teachers have had is significant and our program has clearly changed their teaching and assessment practices.

Through the exploration of Evaluation Question 1 related to the understanding of AfL, the major cross cutting ideas that emerged were that: 1) teachers now locate the impetus for learning within the student and 2) teachers now find themselves on the same team with students in the learning process. Evaluation Question 2 involving teacher use and implementation of AfL strategies resulted in the findings where: 3) teachers now surrender control of certain student behaviors and 4) teachers must often accommodate for high school traditions. And through Evaluation Question 3, pertaining to the attributed value teachers place on AfL, it was discovered that: 5) teachers now regard the formative assessment process as part of what is considered good, effective teaching and not something extra or supplemental to their teaching.

Teachers' Understanding of AfL

There are two significant findings stemming from these teachers' understanding of AfL. The most significant and overarching outcome was that teachers in this program have developed a renewed, and for some, transformed understanding of what the role of assessment is in the learning process for the high school classroom, and that it is student involvement in the assessment process. These teachers have come to understand assessment as a system of decisions and actions that drives the assessment process, and therefore student learning, in their high school classrooms. The other significant discovery was that through their understanding of AfL, major shifts in their assessment practices and policies pertaining to assessment have had to be changed, sometimes in significantly non-traditional ways. Although there was not a complete change in the assessment system to align with AfL and these teachers are in varied levels of change, this subgroup of teachers has made a transformative shift towards a more cognitive and situative view of teaching and learning driven by this AfL professional development program.

Role of assessment. The first and most significant finding was that teachers in this program have developed a renewed, altered, and for some, a transformed understanding of what the role of assessment is for the high school classroom. These teachers have renewed their vision of assessment to understand that assessment is part of a learning process in the AfL classroom. This learning process is put into place by implementing formative assessment strategies in their classrooms in order to engage students in the assessment process. In this way the role of assessment has been

renewed for some teachers, as they began to realize that assessment becomes a part, and not just end, of the learning process. As one participant explains, AfL is "involving students in the process so that they are motivated for more than just points...it's all about mastering the concepts," showing that not only has this teacher's vision of assessment has been renewed, but he has also shifted from a behavioristdifferentiationist view of assessment to a more cognitive-situative view instead.

The increase in student engagement in the assessment process, particularly in student self-assessment has also caused a transformation in the teacher's perception of the role of assessment. By teachers having students reflect on the improvements that they are making in their writing, for example, assessment has been transformed into a learning tool for students, not just a judging mechanism for teachers. This renewed vision and theoretical shift emerged through the Learning Team program, influencing these teachers to embrace formative assessment strategies in their teaching.

The other significant finding pertaining to the role of assessment was the transformation of the learning and assessment process to a more collaborative, social environment that AfL so richly supports. Through AfL, students now have ample time, space and opportunities to learn when formative assessment strategies are implemented. Instruction is now social and collaborative with teachers and students working together through "ample, non-graded opportunities for students to master objectives." This social, collaborative perspective of assessment is indeed transformational, as some teacher had not previously considered assessment as collaborative before our Learning Teams, stating that now teachers are viewed as

"academic coaches, directing the plays...while students are on the field...both working towards the same goal." This transformed view of assessment indicates that a significant shift from a behaviorist-differentiationist view of assessment to a more cognitive-situative view of assessment where students and teachers are collaborative partner in the learning and assessment process. Through our Learning teams, many of these teachers now perceive assessment process as a collaborative and social endeavor, with students and teachers working together towards improved learning and academic achievement.

Not only is the transformed role of assessment key in interpreting the Learning Team teachers' understanding of AfL, I also found that their understanding of AfL and theoretical shift was also supported through their clear explanations and clarification of their instructional and assessment policies that they had amended due to their renewed understanding of AfL.

Practice and policy change. The second noteworthy finding pertaining to these teachers' understanding of AfL was their significant reflection on how their understanding of AfL has influenced both their teaching and often times grading practices and policies. They have found that because their understanding of the renewed assessment system in their teaching has changed due to their work with AfL, oftentimes the practices and policies that drive assessment in their classrooms had to be transformed as well. Some teachers simply renewed or altered their view of their assessment practices, while others deeply transformed the way that they approached assessment practices and policies in their teaching.

One significant policy or practice change that demonstrated a renewed vision of assessment was that formative assessments that are intended as practice for students no longer – or very minimally- "count" in grades anymore; rather, it is an opportunity for students to practice and work towards the mastery of learning targets. Most of these teachers now treat homework, for example, more formatively, and also give students pre-tests to assess what content and/or skills need to be addressed through formative assessments, checking for understanding more frequently. Other renewed changes to policy or practice include weighting grades differently in order to make them more accurately reflect what a student knows and can do, and many teachers have come question the policies that other districts have imposed in the name of AfL. These teachers have begun to experiment with how AfL can revise, alter, renew certain traditional policies and practices, but have not necessarily made a tangible transformation to a comprehensive view of AfL. These teachers have clearly not made a full shift from a behaviorist-differentiationist view of learning and assessment to a more cognitive-situative view since they are still viewing AfL as a revision of certain assessment practices and grading policies and not a complete transformation of the assessment process with student involvement at the core.

As far a true transformation and shift towards a comprehensive and complete understanding of AfL as shown through their transformed teaching practices and policies, I found that some teachers discovered the most significant piece: that student engagement in the assessment process is the most substantial shift in teachers' understanding of AfL. Teachers seem to understand AfL as increased student

involvement in the assessment process by making certain assessment decisions that include the most key strategies associated with AfL. Teachers also understand AfL as those changes to their classroom practices and policies that drive assessment in their teaching. From assessment practices to grading policy, the role of homework to mastery checks, teachers are changing the role of assessment in their classrooms to make students more engaged in the assessment and learning process. These shifts in thinking by our teachers, and the resulting practice and policy changes, show that some teachers understand AfL, but in different ways with some engaging students and stepping aside as assessment facilitators more than others. AfL is a monumental shift in teachers' perceptions of assessment, and the Learning Team teachers have made great strides in integrating AfL into classrooms. We would not expect all teachers in a volunteer or pilot program to have the same intentions or the same results. These findings are significant in that most high schools do not view assessment in this manner, demonstrating a shift in understanding, and ultimately practice, by our teachers may be one of the most noteworthy findings of this evaluation. Distinguishing teachers' understanding, use, and value allows for developing AfL professional learning opportunities, and will serve my district well as we plan our next steps in AfL professional development.

Teachers' Use of AfL Strategies

From the understanding that AfL is the engagement of students in the assessment process, and the finding that it is the assessment decisions that the teacher makes that drives the assessment system in the high school classroom, another

significant finding from this evaluation comes from the evolution in assessment practices in teachers' classrooms. By amending, adjusting, and adding certain assessment strategies, teachers found themselves impacting student learning in significant ways. In examining the Learning Team teachers' use of AfL strategies as a result of our AfL professional development program, I found that teachers either: 1) renewed or altered existing assessment practices or 2) transformed traditional or nonexistent into AfL practices or strategies.

Renewal. In discussing their use of formative assessment strategies, many teachers found themselves altering or renewing their vision of certain classroom practices to align with Assessment *for* Learning philosophies. These altered and renewed strategies included 1) the communication of learning standards to students; 2) descriptive, formative feedback; and 3) non-graded opportunities for learning.

In order to begin to involve students in the assessment process, I found that the most significant and impactful strategy that teachers had renewed and/or altered as a result of our AfL program was having and communicating clear, student-friendly learning standards. The use of learning targets seemed to be the foundation for implementing AfL strategies that our Learning Team teachers use to involve students in the assessment process and was the most frequently implemented strategy that these teachers actually use in their teaching. In this era of learning standards, this is increasingly important, as standards are transformational in getting students to really learn content and skills as opposed to the old model of content coverage. The use of learning targets or objectives clearly involves students in the assessment and learning

process, demonstrating a shift from a behaviorist-differentiationist view of learning and assessment to a more cognitive-situative perspective. Since learning standards involve students by clearly communicating the standards, in student-friendly language, that students are to master, students clearly understand what the learning objectives are, and more importantly, what to expect to demonstrate on assessments. Through the implementation of this strategy, these teachers are involving students in the assessment process by letting them know exactly what learning objectives they need to master to be successful. The renewed vision of learning standards through our Learning Teams showed that many teachers, who had already been posting and communicating learning objectives now had a renewed purpose for doing so, now that they had come to learn that they were and are an integral part of the AfL process that readily improves student achievement.

Another significant renewal occurred as some of our Learning Team teachers began to use frequent, descriptive feedback as a result of our AfL program. Teachers soon found that frequent feedback is significant in that it allows for students to identify their own learning gaps in relation to the learning standards. This is a definite update on the traditional custom of collecting and returning student work for a grade. As one teacher stated, among the AfL strategies that she has implemented in her teaching, "descriptive feedback on all assessments, as opposed to grades, has been the most beneficial for student learning in her classes." Learning Team teachers who have implemented this type of feedback have found students more involved in the learning process, not just the "point accumulation" process, which is a major shift for the

traditional high school setting. This is certainly a changed view of assessment feedback, renewed from the AfL professional development aimed at having teachers make this type of shift from a behaviorist-differentiationist perspective where student feedback is final and meant to sort students, to ta cognitive-situative view where students and teachers use feedback to collaboratively advance student mastery of content and skills.

The last area of assessment that these teachers use that I have found to be renewed or altered through our AfL program is a renewed vision of homework as practice or reinforcement. The most significant finding is that many of these teachers have completely revamped their homework expectations and policies regarding homework, creating homework policies that include optional homework assignments that serve as formative assessments, allowing for students to master the learning objectives of the course in a formative manner. These revised homework traditions, again, allows for students to have greater control and involvement in their learning, and has truly redefined traditional view of homework into a more student-involved, AfL driven practice. These types of assessment revisions that allow for more student involvement in the assessment process have all been driven by the AfL program. In this manner, these student-centered revisions demonstrate another way that these teachers have successfully shifted towards a more cognitive-situative view of learning and assessment.

Transformation. Not only have these teachers altered or renewed their vision of assessment practices, but many also transformed their philosophies and practices to align with the Assessment *for* Learning framework that our professional development

Learning Teams presented and supported. These transformed practices included: 1) student self-assessment and peer-assessment and 2) assessment retake opportunities as a way to refocus the learning enterprise. The transformative shift that places the student at the center of learning is a paradigmatic break with traditional high school practices. When coupled with the clear message to students that learning is the intent and not the accumulation of grades or points, a shift from a teacher-centric orientation is evidenced.

As a result of our AfL program, some teachers have now transformed their assessment practices to include and be dependent on student self-assessment to engage students in the assessment process. Self-assessment clearly draws students into the learning and assessment processes by pushing students to reflect on their own learning in order to realize where gaps are in their skill or content knowledge. Selfassessment involves student reflections on their learning and requires students to evaluate themselves in order to determine what content or skills they have not yet mastered and, most importantly, what to do to correct it. Teachers are not only asking students to tally their learning standards based on their writing samples, but also maintain learning journals, daily and/or weekly self-assessment reflections, as well as engage in peer reflections to draw upon and clarify their own reflections. These activities, these acts of self-assessment are forms of meta-cognition that require learning and practice in their own right, before students are in the habit of assessing their own learning and progress towards learning standards, challenging teachers as well to become more reflective and self-assess themselves as well.

Some Learning Team teachers found themselves relying on student selfassessment in order to reflect their own instruction to determine if there was "something within the teaching that confused them." In this way, these teachers therefore have transformed their assessment process to now use student selfassessment as a result of this AfL program, coming to value self-assessment as a powerful, non-traditional part of the AfL system that actively and deliberately engages students into the assessment process that serves as evidence of the cognitive-situative shift that our program aimed to inspire. This shift not only served the students as they assess their own learning, but the teachers as well as they use that student selfassessment to assess the gaps in their work as well.

Another example of how teachers have transformed their assessment practices by using AfL in their teaching, was through the use of assessment retakes or "re-dos." Many Learning Team teachers have found retakes or "re-dos" to be essential components of the AfL assessment process because it allows for students to continue to be involved in the learning-focus assessment process, even beyond what was traditionally thought of as the end of learning. By teachers offering test corrections, "redos" or test retakes, teachers are allowing students to extend their learning, even beyond what was once considered a summative assessment. These extended learning opportunities are clearly in line with the principles of mastery learning that AfL so richly supports. By offering assessment retakes or "re-dos," these teachers have found an effective way to advance student learning towards mastery by involving them in the assessment process even beyond what has traditionally been the end of the learning

process. Allowing students to extend their learning past the assessment is a radical shift for many traditional-minded teachers; but I found that these teachers have chosen to transform their vision of assessment and allow students to work towards mastery through opportunities for retakes or "re-dos," as introduced and supported through our AfL Learning Teams.

It is my overarching conclusion that these teachers who have been part of our AfL Learning Teams have transformed the way that they perceive the assessment system in their teaching as shown through their active use of AfL strategies in their teaching, despite the norms of the traditional high school pulling them in the opposite direction. The evidence suggests that our AfL program has emphasized formative assessment tools for teachers to use in order to allow students to be actively engaged in the learning process. These Learning Team teachers have redefined assessment as a student and learning focused set of processes, either as renewed within high school traditions or transformed understandings and practices, seeking ways to accommodate AfL concepts into the mainstream, traditional high school setting. They have taken traditional concepts such as homework and quizzes, and renewed or altered them into AfL strategies and processes that function to get students involved in the assessment and collaborative learning process.

Through this renewal or transformation of traditional assessment practices to AfL based strategies, these teachers have made a shift from a behavioristdifferentiationist perspective of assessment and learning to a much more cognitivesituative perspective, where students and teachers are working together, using

assessment as a tool to master learning standards. These teachers have taken the initiative as pioneers in our district to not only know what AfL is, but to actually take action, implement, and as I am about to show, find value in the AfL strategies in their teaching with the ultimate result: student achievement.

Teachers' Value of AfL

Not only were these teachers who had participated in our AfL Learning Teams clearly able to explain their understanding and use of AfL, but they also clearly communicated how they had come to value AfL in their teaching as well, even if it was met with challenge and misunderstanding. These Learning Team teachers have come to renew, alter, or transform their view of assessment and learning, valuing formative assessment practices because they perceive there to be a significant difference in academic and social achievement, and substantial effectiveness with regard to RtI and differentiation. An additional theme that emerged as a result of the discussion regarding the value these Learning Team teachers place on AfL was the renewed vision and future of the AfL professional development program.

Increased student learning. The first significant finding that was expressed by these teachers reinforces everything that is known about the power of AfL: these Learning Team teachers have come to value AfL because students are learning more. These teachers claim that students' performance outcomes are improved, especially since AfL strategies give students multiple opportunities to improve and continue their learning towards the mastery of content and skills. This is a truly transformation shift in that teachers now find that learning and mastery of concepts had become the focus of

their classes, and not homework completion or other compliance-related behaviors. This shift has led teachers to perceive significant improvements in student achievement, including those that are reported through school grade reports. This is a major transformational shift when teachers release compliance and let go of homework as a control issue in their classroom. This shift away from the traditional view of homework and teacher-controlled classroom towards a more mastery-focused, collaborative classroom truly defines the cognitive-situative shift away from the traditional, outdated behaviorist-differentiationist model.

It was also noted that beyond student achievement, most Learning Team teachers' value of AfL comes from students simply becoming better students and learners, improving in the areas of responsibility, self-awareness, and self-knowledge. By communicating learning standards, giving students formative assessments with feedback, and self-assessment opportunities, these teachers have found the classroom to be a much more collaborative setting with teachers and students working together to reach learning goals. This is a substantial and significant shift for these teachers that the professional development program has influenced. These teachers are confident that one of the true values of AfL is that students are now more active in the assessment process and therefore, their own learning. Performance outcomes and summative assessment scores are no longer something that just happens to students, as is common in the traditional high school classroom, but rather students are now much more

themselves as learners and participants in the learning and assessment process was certainly a transformational aspect of the AfL program.

Several other findings related to the value that these teachers now place on AfL also emerged. These findings show a renewed vision as shown through the benefits that these teachers perceive to have become apparent from their use of AfL in their teaching, and are significant in our conversion to the CCSS and NGSS. The enhanced CCSS and NGSS are transformational and necessitate educators to discover new ways to teach and reach all students. AfL gives teachers these standards-driven, studentcentered, mastery-oriented means of changing the assessment and learning processes necessary for CCSS and NGSS.

CCSS & NGSS. One significant way AFL allows these teachers to move towards a CCSS and NGSS-based classroom was the ability to differentiate instruction and use RtI (Response to Intervention) more effectively. Formative assessment strategies allow for students to be independent and self-paced at times, allowing students who have mastered certain learning objectives to focus on different ones from their peers. Teachers can also focus energy on higher level thinking, CCSS and NGSS-based enrichment activities for those who are at or beyond mastery, as well as correctives for those who are not quite there yet. In this way teachers have also come to value AfL in that AfL allows for RtI interventions to more effectively take place, since student assessment is more frequent and standards driven. The ability to effectively differentiate instruction through AfL strategies, and allow for more intensive RtI processes to take place were aspects of AfL that these teachers had come to value.

These teachers not only shifted their understanding and use of formative assessment strategies, but they also came to value the power that AfL has in reaching more students, especially in light of CCSS and NGSS. This value that these teacher place on AfL is a transformational shift in their perception of the learning and assessment process. What was once perceived as a teacher-centered process now has value as a collaborative, student-centered system of learning and assessment where students and teachers work together towards CCSS and NGSS, demonstrating a shift from a behaviorist-differentiationist view of learning and assessment to a cognitivedifferentiationist perspective. This shift was exactly what the AfL Learning Team approach was intended to achieve.

Motivation. Another benefit and renewed vision for some teachers had to do with student motivation. It was my finding that there was a mixed reaction as to the value of AfL according to these teachers. While some teachers declared that student motivation had improved through the use of AfL strategies, especially in formative assessment completion, others were not whole-heartedly convinced that AfL had improved student motivation at all. While some teachers did still feel that students' reactions, most likely as a result of some engrained traditional assessment patterns, still remained rather confused, particularly about not earning points for formative assignments. While it was discussed that motivating students to buy into the AfL strategies took some time due to the traditional nature assessment that these students have been accustomed to. However, many of the teachers shared the insight that once students began to understand that learning and their involvement in the assessment

process was most important to their success in the class, then they typically became more motivated to get involved in their learning. These teachers then found true value in the AfL, as it was driving students to become increasingly motivated to become successful in their learning. This attributed value represents another shift towards the student-centered, cognitive-situative view of learning and assessment.

Implications

The purpose of this program evaluation was to determine if the implementation of a grassroots professional development program would impact teachers' understanding, use and attributed value of AfL in their teaching, and influence a shift to a cognitive-situative perspective of learning and assessment. While other schools and districts have utilized and relied on top-down approaches towards AfL related policies that seem to de-professionalize teaching, our district had chosen to use a Learning Team approach to professional development to influence teachers to come to understand, use, and value AfL in their teaching (Hargreaves & Fullan, 2012). This approach allowed for these teachers to choose to implement formative assessment strategies in their teaching at their own comfort level, prodded by the learning team approach who met at regular intervals to discuss their progress and support each other in their AfL implementation.

The results of the evaluation supports the research that states that a learning team approach to professional development does work to influence teachers either renew, alter or transform their classroom practices to align with the AfL framework (DuFour & Eaker, 1998; Stiggins, 2005). These teachers had come to understand the

premises of AfL, but not without some challenges with its inception as evidenced by the variances in the teachers' understanding of what AfL is, their use of the formative assessment strategies in their teaching, and the attributed value they place on their use of AfL strategies in their teaching.

Overall, the Learning Team teachers in this program evaluation understands the concepts and philosophies behind AfL and what they needed to do to effectively implement the AfL strategies in their teaching to get students more involved in the learning and assessment process. Some teachers were more complete in their understanding, using, and valuing, and often had significant variations as expressed in their responses to my questions. Although these teachers seemed to approach the strategies slightly differently, all seemed to have made some sort of change to their classroom assessment practices to involve students in the learning process; for example, changing the perception and nature of formative assessments as safe ways for students to fail, grow, and learn, a major shift in the traditional view of assessment.

The results of this program evaluation also show that these teachers have come to value AfL through the many benefits that come with the implementation of AfL strategies, the most significant one being students were becoming far more involved in their own learning and the assessment process. Another benefit expressed by these teachers was that students had come to understand that students began to understand the educational value of formative assignments. No longer were these formative assessments used by these teachers as just classwork or homework, but as useful preparation for a summative assessment, allowing teachers and students to work

together towards mastery of learning goals. According to these teachers, there is no doubt that the implementation of AfL strategies dramatically improves student achievement, especially in the lowest achieving students (Black & Wiliam, 1998; Chappuis, 2006; Popham, 2008; Stiggins, 2005).

The results of this program evaluation indicate that the Learning Team approach to professional development has worked to achieve the goals of bringing AfL philosophies and strategies into the classroom of our district, but not all to a comparable level of integration. Most of the Learning Team teachers have come to understand the philosophies and strategies of AfL, use at least a few formative assessment strategies in their teaching, and value AfL strategies as a way to improve student achievement. These are results that speak to the value and effectiveness of our program, and will guide our leadership team in ways to continue to have this program move forward to influence even more of our teachers to understand and use formative assessment strategies in their teaching.

However, many of the learning team teachers had difficulties differentiating and moving beyond between what was truly considered part of the AfL framework and what is still engrained as traditional assessment practices. These teachers' responses often diverted towards grading practices and homework completion, for example, rather than the deeper understanding of what AfL is as a process and philosophy. What this means, is that these teachers now walk a fault line, knowing and understanding what effective AfL philosophy and practices are, while still living in the very unfriendly, traditional world of grading, points accumulation, and homework completion. This is where many

of our teachers were caught up in discussing these fault lines, attempting to be progressive in their assessment beliefs and practices while still being bogged down in traditional high school expectations from both students and parents regarding grading, homework, and testing.

The teachers in these Learning teams now have the challenge, as they clearly communicated, of attempting to merge these renewed, altered, and transformed understandings and applications of formative assessment strategies into the high school model that is still deeply embedded in traditional grading and points-based assessment outcomes. They are the foundation for an assessment subculture at Lincoln-Way, forging forward with innovative ways to bridge the progressive AfL model with the outdated traditions that still permeate our high schools. It is this subculture that the Learning Team model supports with opportunities for these pioneering teachers to engage in meaningful and innovative discussions and take action in order to continue the theoretical shift from a traditional, teacher-centered, behaviorist-differentiationist view of learning and assessment to a collaborative, student-centered cognitive-situative perspective.

Program Recommendations

This evaluation explored through teacher perceptions if our grassroots, Learning Team-based AfL professional development program worked to get teachers to make a theoretical shift and come to understand, use and value AfL strategies in their teaching. Through this evaluation I intend to guide decisions in our district for the future of our Assessment *for* Learning program based on the results, since the true purpose of any

program evaluation is to "provide useful information for future decision-making" (Stufflebeam, 1983, p. 120). Therefore, it is my intent that this evaluation will help our leadership team at Lincoln-Way decide how we should proceed in order to improve and further develop the AfL professional development program for the future, since "the most important purpose of evaluation is not to prove but to improve" (Shufflebeam, 1983).

After examining the results of this program evaluation, I can make the following recommendations with respect to our AfL program: 1) continue the present program with another set of teachers, only with Learning Team members assuming leadership roles to facilitate the new group and 2) maintain these teachers working in Learning Teams to support discussion, problem-solving, and innovation in order to find ways to transform the outdated assessment traditions to the more AfL-based practices and policies.

Since our AfL professional development program, Learning Teams in particular, resulted in a good set of first steps towards teachers coming to understand, use, and value AfL, and begin to make the theoretical shift from a traditional, teacher-centered, behaviorist-differentiationist view of learning and assessment to a collaborative, student-centered cognitive-situative perspective, these steps should be repeated for new groups of teachers, particularly as part of our teacher induction and mentoring program. However, instead of the administration facilitating the program, it would now be our original Learning Team acting as teacher-leaders guiding the new teachers in the ways of AfL. By motivating and encouraging more teachers to make the theoretical

shift and invite students into the assessment process by using AfL-based strategies, the more teachers will begin to see how students and teachers both will find value from these types of AfL philosophies and strategies in their classes, and ultimately, the more students will academically benefit from them. With their own peers as their leaders, it would be my hope that this Learning Team approach would only serve to motivate and encourage even more teachers to come to understand AfL and put formative assessment strategies into practice as well. The more teachers who utilize these types of AfL philosophies and strategies in their classes, the more students will become

increasingly engaged in the assessment process and academically benefit from them.

In discussing AfL professional development and the Learning Teams, the

Learning Team teacher conversations often took surprising turn towards a discussion of

the future of AfL in our district even,

wishing that there is time built into institute days in the future, where we could use time to work out a unit or chapter including AfL processes throughout a unit, not just a lab or lesson, and then have department members share it with each other. In that way, teachers could share the AfL approach from beginning to end, making it so much more meaningful to create the unit from objectives to assessments to labs to summatives, building in to the unit design the opportunities for students to determine and inform the teacher how they are doing, and what the teacher should do with that information. It would be beginning with the end in mind in terms of AfL. Through the discussion of the future of AfL stemming from the discussion of the

benefits it has for students and teachers, next came the flipside discussion of the

challenges that AfL poses. The teachers have found themselves ready for the extensions

of what they have done so far with their AfL, causing them to be prepared for

challenges.

Although each participant credited the district's professional development

programming for encouraging them to implement AfL, it can also be implied that further professional development efforts are needed to continue to support these teachers with this theoretically shifted educational practice and philosophy. Systemic shifts like this one in how teachers teach and assess are extremely challenging, especially since students, parents/family, community and even administration all have expectations of the traditional high school. However, ongoing, in-house support of the Learning Team approach to change has yielded positive results and is certainly one way that our district can continue to support the efforts and innovation of these teachers who have bravely pioneered these ideas and strategies in their classes.

Summary

It is my hope that this program evaluation will provide my high school district some insights on how we have successfully began breaking assessment traditions with the theoretical shift that includes bringing AfL principles and strategies to our classrooms in a grassroots, Learning Team based approach to professional development. Our teachers who have been part of this program have come to understand, use, and value AfL through a program that respected their professionalism in allowing them to learn about, experiment with, and hopefully come to value AfL strategies while being supported and guided in our program. Top down policies often disrespect teachers and their professionalism, and more concernedly, often lead to misunderstanding and ineffective implementation of AfL strategies (Hargreaves & Fullan, 2012). This program evaluation intended to discover the effectiveness of our program and also provide our district with guidance and direction for the future. It is also my sincere hope that my

district, and other high school districts as well, sees the value in a grassroots approach to professional development and will continue to respect teachers' professionalism in an era of change and revolution driven by CCSS and NGSS. Many high schools across the country are still embedded in outdated, traditional assessment practices, while others have begun the imposed assessment transformation. In either case, it is my hope that this program evaluation provides insight and motivation not only for other schools to move forward in their assessment reforms, but also for further study and development in this area by other educators.

Assessment *for* Learning, formative assessment, is not just a trend or fad in education. Educators, who realize its effectiveness and benefits in the classrooms, and how it transcends traditional thinking about assessment, are leading the way in taking students into the post-NCLB, exciting future of assessment and education that CCSS and NGSS now demand.

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APPENDIX A

RECRUITMENT LETTER



ILLINOIS STATE UNIVERSITY Illinois' first public university College of Education Department of Educational Administration and Foundations

331 DeGarmo Hall Campus Box 5900 Normal, IL 61790-5900 Phone: (309) 438-5422 coe.ilstu.edu/eafdept/

February 2013

Dear ____

I am a doctoral student at Illinois State University. I am currently in the dissertation phase of my doctoral program, and I am conducting a research study to explore the understanding, use, and value of formative assessment from secondary teachers who have participated in professional development on formative assessment for the past five years.

I am requesting your participation, which will involve one audio-taped interview with me that will take place in a location convenient to you. I expect the focus group interview to last approximately 45 - 60 minutes. The questions will relate to your understanding, use, value of formative assessment strategies in your classroom as a result of your participation in our Assessment *for* Learning staff development program.

I am also requesting any documents that might relate to your use of formative assessment (such as, worksheets, rubrics, or written activities meant to promote feedback between the you and a student, but not documents of actual student work), and an invitation to observe your classroom for no more than 60 minutes with a focus on your use of formative assessment.

Your participation is voluntary. If you would like to be a part of this research study, please respond to this e-mail: <u>afeehery@lw210.org</u>. I will call you within 1 - 2 days to set up a convenient time for the interview, document collection, and/or observation.

Thank you very much for your time and interest in this study.

Sincerely,

Aimee Feehery

APPENDIX B

INFORMED CONSENT FORM



College of Education Department of Educational Administration and Foundations

331 DeGarmo Hall Campus Box 5900 Normal, IL 61790-5900 Phone: (309) 438-5422 coc.ilstu.edu/eafdept/

March 2013

Dear _____:

I am a doctoral student in the College of Education at Illinois State University. I am conducting a research study to explore secondary teachers' understanding, use and value of formative assessment strategies. Therefore, I am requesting your participation, which will involve one focus group interview with me that will take place at a location convenient to you and last about 45-60 minutes. The interview will be audio taped with your permission. I may also request documents that might relate to your use of formative assessment, and an invitation to observe your classroom for no more than 60 minutes with a focus on your use of formative assessment.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty of any kind. Your decision to participate or not to participate will not affect your employment in any way. The results of this study and possibly future research studies may be published, but your name will not be used. I will take all precautions to maintain your confidentiality (your name will not be used, and the transcript from our interview will not be shared with anyone). For example, pseudonyms will be used during the interview and the final report.

There are minimal physical, psychological or social risks to this research study. However, you may be concerned that the information revealed in the interview regarding your understanding, use, and perceptions of formative assessment could get to your superiors and/or evaluators and somehow affect your employability. You may even fear that your feelings about formative assessment may affect your reputation by information from the interview being revealed to their colleagues.

To minimize any employability risk, interviews will be conducted in settings that provide the maximum amount of privacy and confidentiality. Documents will be collected only if you choose to share them. Observations will be done in classroom settings upon invitation only. Pseudonyms will be used during the interview and in the written report. As indicated in the consent form, you will have the right to refuse to answer any questions of your choosing.

Although there may be no direct benefit to you, the possible benefit of your participation would be to discover teacher understanding, use and perceptions of formative assessment that may enhance educational research in formative assessment.

If you have any questions concerning the research study, please call me at (815) 412-9317 .

Sincerely,

Aimee Feehery

I give consent to participate in the above study. I understand that my interview will be audiotaped.

Signature

Date

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Research Ethics & Compliance Office at Illinois State University at (309) 438-2529.

APPENDIX C

DANIELSON'S OBSERVATION PROTOCOL

FI	GURE I.I	
Domains, Components, and Ele	ements of the Framework for Teaching	
Domain I: Planning and Preparation	Domain 2:The Classroom Environment	
Component 1a: Demonstrating Knowledge of Content and Pedagogy	Component 2a: Creating an Erwironment of Respect and Rapport	
 Knowledge of content and the structure of the discipline 	 Teacher interaction with students 	
 Knowledge of prerequisite relationships 	 Student interactions with other students 	
 Knowledge of content-related pedagogy 		
	Component 2b: Establishing a Culture for Learning	
Component. Ib: Demonstrating Knowledge of Students	 Importance of the content 	
 Knowledge of child and adolescent development. 	 Expectations for learning and achievement 	
 Knowledge of the learning process 	 Student pride in work 	
· Knowledge of students' skills, knowledge, and language proficiency		
· Knowledge of students' interests and cultural heritage	Component 2c: Managing Classroom Procedures	
 Knowledge of students' special needs 	 Management of instructional groups 	
•	 Management of transitions 	
Component. I c: Setting Instructional Outcomes	 Management of materials and supplies 	
 Value, sequence, and alignment 	 Performance of noninstructional duties 	
Clarity	 Supervision of volunteers and paraprofessionals 	
Balance		
 Suitability for diverse learners 	Component 2d: Managing Student Behavior	
	Expectations	
Component 1d: Demonstrating Knowledge of Resources	 Monitoring of student behavior 	
Resources for classroom use	 Response to student misbehavior 	
 Resources to extend content knowledge and pedagogy 		
* Resources for students	Component 2e: Organizing Physical Space	
	 Safety and accessibility 	
Component 1e: Designing Coherent Instruction	 Arrangement of furniture and use of physical resources 	
Learning activities		
* Instructional materials and resources		
 Instructional groups 		
Lesson and unit structure		
Component If: Designing Student Assessments		
 Congruence with instructional outcomes 		
Criteria and standards		
 Design of formative assessments 		
Use for planning		(figure continu

Domains, Components, and El	lements of the Framework for Teaching (continued)
Domain 3: Instruction	Domain 4: Professional Responsibilities
Component 3a: Communicating with Students	Component 4a: Reflecting on Teaching
* Expectations for learning	Accuracy
Directions and procedures	Use in future teaching
Explanations of content	
 Use of oral and written language 	Component 4b: Maintaining Accurate Records
	 Student completion of assignments
Component 3b: Using Questioning and Discussion Techniques	 Student progress in learning
Quality of questions	 Noninstructional records
Discussion techniques	
Student participation	Component 4c: Communicating with Families
	 Information about the instructional program
Component 3c: Engaging Students in Learning	 Information about individual students
 Activities and assignments 	 Engagement of families in the instructional program
+ Grouping of students	
 Instructional materials and resources 	Component 4d: Participating in a Professional Community
 Structure and pacing 	 Relationships with colleagues
	 Involvement in a culture of professional inquiry
Component 3d: Using Assessment in Instruction	Service to the school
Assessment criteria	 Participation in school and district projects
 Monitoring of student learning 	
+ Feedback to students	Component 4e: Growing and Developing Professionally
 Student self-assessment and monitoring of progress 	 Enhancement of content knowledge and pedagogical skill
	 Receptivity to feedback from colleagues
Component Je: Demonstrating Flexibility and Responsiveness	 Service to the profession
+ Lesson adjustment	
 Response to students 	Component 4f: Showing Professionalism
Persistence	 Integrity and ethical conduct
	 Service to students
	Advocacy
	Decision making
	 Compliance with school and district regulations

APPENDIX D

FOCUS GROUP INTERVIEW GUIDE

Teachers participating in the focus groups have been part of Assessment *for* Learning (AfL) professional development for the past five years. The purpose of the question probes below is to determine the teachers' understanding, use and value of formative assessment:

"Understanding:"

- 1. How would you describe Assessment for Learning (AfL)?
- 2. What are some strategies associated with AfL?
- 3. Please explain how any of the documents that you have provided are examples of AfL.

"Use:"

- 4. What AfL strategies do you presently use?
- 5. How have you implemented formative assessment strategies in your classroom?
- 6. What practices or policies have you changed in your classroom as a result of the AfL professional

development program?

"Value:"

- 7. What has been the reaction of students to formative assessment strategies?
- 8. What has formative assessment done for student achievement and/or student motivation?
- 9. How has AfL affected your teaching?

APPENDIX E

AGENDA - 4 DAY TRAINING

AGENDA-4 day Training Day 1

Dublin adyschools, net

8:30 - 3:30

Creating Accurate Assessments

AM

Learning Target: Key Purpose

- I can discuss the general research supporting profound effects of Afl on student achievement. Chapter 1
- I can describe the fundamental difference between assessment for/of learning. Chapter 2

Jigsaw articles

Power Point

Emotional Impact of assessments

Why is accuracy important

Assessment for/of learning

7 Afl Strategies ~ page 41-46 in CASL (Classin and for Student Ling. Text)

PM

Learning Target:

• I can take the broad statements of state content standards and turn them into student-friendly classroom level targets. Chapter 3

Understand scaffolding of learning

Power Point

Write own learning targets~ Assess What?

Share Targets- Discuss

Assessment *for* Learning Twelve Meeting Learning Team Plan

Meeting One: The Big Picture

a

Learning Target:	I can discuss the general research supporting the profound effects of AFL on student achievement.
Activities:	 Watch DVD Align, Assess, Achieve Jigsaw Articles (6) on the research supporting formative assessment
Materials:	DVD, Articles, Big Paper, Handouts
Homework:	CASL - Chapter one, 5 Keys to Quality Assessment, pages 3-18

Meeting Two: Five Keys to Quality Assessment

Learnin	ng Target:	I can explain how the five keys to quality can be used to create accurate assessments that will provide clear communication to my students.	
Activiti	es:	 HW Discussion - The 5 Keys to Quality Assessment (pg. 7) The Emotional Impact of Assessment - Big Paper (pg. 8) Why is it Important to Gather Accurate Information? (pg. 9) 	
Materia	ls	Big Paper, Handouts	
Homew	ork:	CASL - Chapter two, Assessment for and of Learning, pages 29 - 46	
Meeting Three: Assessment for and of Learning			
Learnin	g Targets:	I can describe the fundamental differences between assessment for and of learning.	
		I can describe strategies designed to bring students inside the assessment system as they monitor their own growth.	
Activiti	es:	1. HW Discussion The Key of Purpose (pg. 10)	

HW Discussion -- The Key of Purpose (pg. 10)
 Assessment OF/FOR Learning Key (pg. 11)
 Seven Strategies of Assessment *for* Learning (pg. 13 -22)
 Where I Am Now Checklist (pg. 23)

5. What Does Assessment for Learning Look Like? (pg. 55)

1

Homework:	CASL – Chapter three, Clear Targets, pages 53 – 84
	Bring curriculum guides to the next meeting

Handouts

Bainbridge/Holman 2007

Materials:

Learning Target:	I can select the appropriate assessment method to match the learning target	
Activities:	 HW Discussion The Key of Design (pg. 56) Target Method Match (pg. 58) Selected response - Franzipanics (pg. 59) Extended Response Action Boxes (pg. 60 - 63) Auditing Assessments for Sound Design 	
Materials:	Handouts	
Homework:	Bring your own assessments to audit for sound design	
Meeting Eight: Auditing Assessments for Sound Design		

Learning Target	I can audit an assessment for sound design.
Activities:	 Analyze sample assessments for Sound Design Analyze your own assessments for Sound Design (pg 68-69)
Materials:	Sound Design Audit – Worksheet and Assessments Extra Clear Purpose and Learning Target Audit forms (pg. 68-69)
Homework:	CASL - Chapter Nine, Communicating About Student Learning, pages 279 -299

Meeting Nine: Descriptive vs. Evaluative Feedback

Learning Target:	I understand the difference between descriptive and evaluative feedback and can develop strategies to give my students feedback on their learning.
Activities:	 Brainstorm Name are all of the different ways your students receive feedback Big Paper Characteristics of effective feedback (pg.71) Descriptive or Evaluative Feedback? (pg.72) Student Math Problem Solving How would you provide feedback? (pg. 73-74) Brainstorm/Discussion How could you provide more descriptive feedback within your content area?
Materials	Handouts, Big Paper, Copies – "How to Grade for Learning"
Homework: Meeting Ten:	"How to Grade for Learning" pages 17-24 Sound Grading Practices

Bainbridge/Holman 2007

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3

Learning Target:	I can identify the principles to sound grading practice and have developed a deeper understanding of how to motivate students with learning instead of points.
Activities:	 Activity - For or against the following factors being included in a student's grade - Effort, Ability, Attitude, and Behavior - Big Paper Factors Often Included in Grades Worksheet (pg. 78) Exercises for Exploring Factors Included in the Grade (pg. 79) Possible Solutions to Problems (pg. 80) Chris Brown's Grade book (pg. 82-83) Discussion - What beliefs about grading must be overcome?
Materials	Handouts, Big Paper, Book - 15 fixes for broken Grades
Homework:	A Repair Kit for Grading, 15 Fixes for Broken Grades Read chapter one, pages $3 - 15$, Pick 3 fixes that grab your attention and read about each.

Meeting Eleven: Sound Grading Practices

Learning Target:	I can identify the principles to sound grading practice and have developed a deeper understanding of how to motivate students with learning instead of points.
Activities:	 Activity - 15 Fixes for Broken Grades Discussion What barriers must be addressed to implement sound grading in your class/district?
Materials	Strips - 15 fixes for broken grades
Homework:	None

Meeting Twelve: Reflection

Learning Target:	I can use AFL principles such as clear learning targets, assessment for learning, sound design, descriptive feedback, flexible and sound grading principles to maximize growth for all students.
Activities:	 Read- Teacher Voice by Gary Nunnally Where are you on your journey? Discussion where do we go from here?
Materials	Gary Nunnally Article

Bainbridge/Holman 2007

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Do you really know what your students know? If you're not sure, then this memo is for you ...

As part of our school goal of assessment for learning, we are forming an Assessment Learning Team pilot program. This pilot will bring together a crosscurricular group from each school (Central, East and North) to participate in a year-long program to examine and pioneer the formative assessment approach to teaching and learning. Each school's team will begin meeting in the fall of the 2008-2009 school year.

If you are excited by some of the concepts that Dr. Bobb Darnell brought to us on Institute Day, this program is for you. The assessment teams will go beyond the "I Can" statements, looking at a new way to approach how we teach, how we assess and how we grade students.

There will be a series of three informational sessions to introduce the team concept. Sessions will be held at both East and Central, and last no more than 20-25 minutes. Please feel free to attend at either school.

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Session 1:		
Wednesday, April 30 th	East- Room 224	7:20 am or 1:45 pm
Thursday, May 1st	Central- Board Room	7:45 am or 3:00 pm
Session 2:		
Wednesday, May 7 th	East- Room 224	7:20 am
Thursday, May 8th	East- Room 224	1:45 pm
	Central- Board Room	7:45 am or 3:00 pm
Session 3:		
Wednesday, May 14 th	East- Room 224	7:20 am or 1:45 pm
	Central- Board Room	7:45 am or 3:00 pm

If you have any questions, please contact Lynn Merrick or Kathy Wilkey at East, and Tom Bartkus, Jeana Naujokas or Cindy Sikora at Central.

- Some thoughts about assessment for learning:
 "We are not changing *what* we assess, but *how* we assess and what we do with that assessment.
 "When the cook tastes the soup he is making, that's *formative* assessment. When the customer tastes the soup, that's *summative*
 - customer tastes the soup, that's summative assessment."
 - "Are you using your grades to determine learning or control behavior?"

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