

Giving a structural framework for Ohio's Value-Added Model: What all educators should know?

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A qualitative case study of one rural elementary school in Ohio examined how faculty, administrators, students, and parents experienced Ohio's Value-added model. The findings generated from looking at planning and professional development to implementation of the model generated a close-up of a successful approach to helping teachers use multiple assessments to form and reshape student learning. A bi-product of the study is a strong framework for expanding and strengthening the model.

In 1992, legislators in Tennessee passed the Education Improvement Act to hold educators accountable for their performance. During this time, William Sanders studied the effects of value-added assessment for the state of Tennessee. Today, several states use value-added assessment as part of their accountability system. Value-added assessment measures the effectiveness of a school and its teachers by using data on individual students' academic growth over time. In other words, a student must make at least one-year's growth before moving on to the next grade level.

In 2002, Battelle for Kids, a non-profit organization located in Columbus, Ohio, created Project Schools' Online Assessment Reports (SOAR). This statewide pilot, in conjunction with the Ohio Department of Education (ODE), introduced value-added analysis to 42 districts in Ohio. Participating schools received professional development and tools to support this initiative. In 2003, legislators passed Ohio House Bill 3, which made value-added part of Ohio law. It is evident that Ohio is and continues

to be committed to implementing value-added assessment as an accountability tool to measure student yearly growth.

This qualitative study gives a detailed description of how one school experiences and implements Ohio's value-added model. The method for selecting participants for the study is referred to as "purposeful sampling" (Patton, 2002). "Information – rich cases are those from which one can learn a great deal about the issues of central importance to the purpose of inquiry, thus the term purposeful sampling" (p. 230). Interviews, classroom observations, and examination of school and student data were used to triangulate the study.

In preparation for this case study, the researchers discovered that Ohio's Value-added model lacked a specific framework. The researchers examined value-added training manuals used to train District Value-Added Specialist (DVAS) and found no evidence of a working framework. Although the manuals

listed guiding principles as a learning objective for participants, they were never identified in these manuals or presented during trainings. Consequentially, information from this study was used to conceptualize the framework.

This paper will discuss the purpose for the study, identify the background and reasons for choosing the research site, identify the method used to find common themes, and provide a framework for the model. Lastly, the discussion piece provides a detailed description of supporting evidence that was used to develop the framework.

Purpose of the Study

The purpose of this study was to provide a description of how one school implements and experiences Ohio's value-added model at the elementary school level. This study will assist other principals, teachers, and lawmakers in the future by providing a better understanding of Ohio's value-added model. This research answers the following questions:

1. How is value-added assessment being implemented and what does that mean to teachers, principals, and stakeholders?
2. What is the context of Ohio's value-added model at the school level?
3. What are the types of services and training received by administrators and teachers?
4. What are the effects of Ohio's value-added model on one specific school?

This study used selected interview questions that have been developed for each research question. The interviews included eight teachers, one administrator, and three stakeholders. The teachers selected for the study were employed in the research site for at least three consecutive years and had to teach fifth, sixth, seventh, or eighth grade students. In addition, the building administrator held a valid Ohio professional certificate and had prior knowledge of value-added assessment. The stakeholder participants

were parents of a school-age child at the research site. Document analysis, classroom observations, and grade level meeting observations provided a detailed in-depth picture as a phenomenon was occurring. Thus, the emergence of themes occurred as a result of interviews, observations, and document examination.

Background and Reasons for Choosing the Research Site

The research site was an elementary school in a rural community that has been in existence for 28 years. The study was delimited to grades five through eight. The site is centrally located in the county and houses 324 students in grades five through eight with a free and reduced lunch rate above 40%. It is important to note that the researchers were not employees of the research school system.

The school was chosen for two reasons. First, the district of the research site participated in a statewide project prior to value-added become law. Early exposure of value-added assessment training gave staff the opportunity to implement it slowly at the building level. Three teachers and the principal were invited to attend several value-added sessions even before value-added became law in Ohio in 2003. When it became part of the state report card in 2007, this particular school was already familiar and heavily immersed in value-added data. Second, the research site showed overall positive growth at both the district and building levels. The 2007-2008 state report card indicated that this school received an "Excellent" designation, which meant it met all four measures of performance. One of the four measures of performance it met was the value-added component. The building received an overall composite rating of "Above Expected Growth." The significance of this rating of "Above Expected Growth" indicated a greater than one year of progress had been achieved. Students were not only meeting a year's growth, they were exceeding it. A school

that is familiar and successful with value-added assessment constituted a good case study to find out how teachers and the building administrator implemented and experienced the model. Much can be learned from an up-close view of this particular research site.

Data Analysis

The Constant Comparison Method of data was used to code and compare data (Maykut & Morehouse, 1994). The model includes four steps: “(1) Inductive category coding and simultaneous comparing of units of meaning across categories; (2) Refinement of categories; (3) Exploration of relationships and patterns across categories; (4) Integration of data yielding an understanding of people and settings being studied” (p. 135). These four steps were used to find emerging themes from categorized information as they relate to the four research questions.

Sample interview questions were developed for each of the four guiding questions. Four of Patton’s six question types were used by the researchers and included (a) experience and behavior questions, (b) opinion and values questions, (c) feeling questions, and (d) knowledge questions (2002). Maykut and Morehouse posited that “On any given topic, it is possible to ask any of these questions. Distinguishing types of questions forces the interviewer to be clear about what is being asked and helps the interviewee respond appropriately” (p. 348). The types of interviews used in this study include guided, informal, and open-ended questions. Findings from this in-depth case study resulted in twelve emerging themes (see Table 1).

The Framework for Ohio’s Value-added Model

This case study of Ohio’s Value-added model was carefully selected and conducted in 2008. If Ohio used this framework for professional

development, there could be more cohesion and commonalities of how to successfully implement the model at all building levels. Series consideration should be given to this framework for the following reasons: (1) The emergent of themes supports the notion that teachers receiving professional development would appreciate a framework; (2) It would equalize the implementation process because everyone would be working from the same plan; and (3) It would increase the understanding and awareness of the model.

Ohio continues to place a strong emphasis on professional development that focuses on value-added assessment. Many of these trainings incorporate the use of formative assessments as a tool to monitor student growth. Although the model shows great promise, a structural framework is needed to outline its guiding principles. The developed framework includes: (1) Student Achievement, Student Growth, and Student Success; (2) Teacher and Administrative Quality and Professional Development; (3) Leadership of the Model; and (4) Stakeholder Enlistment and Support.

Student Achievement, Student Growth, and Student Success

In the state of Ohio, standardized testing is one of several ways to measure student achievement. All students in grades three through eight and tenth attending a public school must take the Ohio Achievement Test (OAT). Each year, the Ohio Department of Education (ODE) publishes a report card for the state and for each public school system and school in the state. ODE revised its operating standards in 2006 to include value-added assessment. According to Ohio’s Operating Standards (2006), all public schools will “... implement a value-added progress dimension for school districts and buildings...” and “...incorporate the value-added progress dimension into the report cards

and performance ratings issued for districts and buildings...” (Section 3302.021 [A]).

Ohio has multiple key performance indicators in place to measure student achievement, including the value-added model and formative assessments at the classroom level. Lambert (2003) contends that the term “student achievement” means much more than the required achievement test students take at the end of the school year. In addition to student test scores, student achievement can be measured by using developmental and other performance measures, such as portfolios and rubrics. Ongoing assessments coupled with value-added data and standardized tests give teachers a clearer picture of how a child is performing academically.

It is imperative that every educator understand and develop a culture of growth that includes effective classroom assessment practices. According to Black and Wiliam (1998), the use of formative assessments in the classroom can raise the growth of a student. Student expectations can be raised if schools develop an assessment system that builds student self-esteem, provides an opportunity for student feedback and reflection, and allows students to use higher level thinking skills.

What does this mean for the educational leader? First, it means that principals must establish a teamwork-based learning culture that supports student growth through job-embedded professional development. A professional learning community (PLC) is essential for endorsing professional growth. Schools that have a professional community enable teachers and leaders to work as teams in order to develop sound classroom assessment practices (Stiggins, 2005). Second, schools are more accountable today for raising test scores than in previous years. As a result, leaders must step up and take an active role to ensure all students are making positive academic and affective growth gains. This means that student assessment must

be a major priority for leaders. Summative assessments alone are not enough to raise student achievement. It takes multiple key performance indicators to be part of every assessment system. Without them, educators lack the necessary data to ensure every child is achieving and growing to their maximum potential.

Teacher and Administrative Quality and Professional Development

Research continues to show that teachers have the greatest impact on student learning (Marzano, 2003). The good news is that teachers have an enormous impact on student achievement, student growth, and student success. High quality teaching includes differentiating instruction, administering formative assessments, aligning the curriculum to the standards, and obtaining student feedback to make pertinent decisions regarding the instructional process (Pollock, 2007).

With the implementation of Ohio’s Value-added model, teachers now can obtain important student diagnostic information not previously available with traditional achievement reporting. This information can be used to make important pedagogical decisions at the classroom level by using meaningful professional development. Teachers are able to use value-added data to provide appropriate intervention or enrichment or modify instruction to maximize student growth. Teachers are better able to monitor student’s progress through formative benchmarks, predict students’ future academic performance, differentiate instruction to address all students’ needs and align professional development efforts in the areas of greatest need in a timely fashion.

Principals must also be heavily immersed in professional development efforts at the school level. They must facilitate, collect, and analyze data about the school’s progress toward attaining established goals using job-embedded professional development. For administrators to achieve excellence in their work, they

must be instructional leaders that support the implementation of high-quality standards-based instruction that results in higher levels of student achievement, student growth, and student success. We need teachers to be leaders in the classroom and we need principals to help teachers become better teacher leaders.

Leadership of the Model

The expectations of the building principal have changed over the years. The principal no longer only functions as a manager for the school. Today, principals must be instructional leaders that ensure teachers are using instructional practices to meet the needs of all students. Similarly, the Interstate School Leaders Licensure Consortium (ISLLC) contends that education leaders should advocate and sustain a school culture where instructional leadership links to student achievement and professional development. Leithwood (1992) makes the argument that the term “transformational leadership” includes instructional leadership. In other words, instructional leadership focuses on the principal closely monitoring teacher and student’s work. The goal is to help teachers become better classroom leaders by encouraging them to use different instructional strategies to reach all students.

Leaders in the 21st century are expected to help reduce the achievement gap by providing research-based professional development to teachers. For example, professional development may include mapping the curriculum, improving pedagogical skills, or analyzing data to set goals. Most importantly, the principal’s role is to create a positive school environment that focuses on the use of data for redesigning the curriculum, instruction, school organization, and teacher quality. However, school leaders cannot ignore the importance of stakeholder alignment with the district’s strategic plan.

Stakeholder Enlistment and Support

Hord and Sommers (2008) report that parents and community members help make up a PLC. A PLC encompasses school professional learning, stakeholder involvement, and collaboration for stakeholders to give and receive feedback that supports the goals of the learning organization. It is a two-fold process because the community member and stakeholders are enlisted due to their shared vision and support, which becomes an abundant outflow of the leadership and communication effort. The developed framework includes stakeholders as an important piece of the study.

Vaishnav (2005) observes that all questions pertaining to value-added assessment have not been answered. The value-added statistical calculations are very technical and the predictions of student progress can be misleading. Because little is known about principals’ views and experiences on value-added assessment in Ohio, this descriptive case study employing multiple strategies was used to investigate a contemporary phenomenon within its real-life context.

Discussion

Research from this study indicated that teachers used a variety of assessments to measure student performance. Teacher D said, “Value-added plays an important part of how I instruct the students. I have to take into consideration the high, medium, and low students. I need to reach all of them.” In addition, Teacher H stated, “You take the standards you teach in the classroom and then you look at the students coming in and the value-added data. Teacher H continued, “Teachers do a good job of coming up with formative assessments that specifically deal with the value-added data.”

Professional development was a positive learning experience that involved teachers engaging in meaningful tasks. Also, a fully

supportive organizational culture existed for them to take risks, which contributed to their quality teaching. Research suggests that teachers have the greatest impact on student learning (Marzano, 2003; Schmoker, 1999). There was evidence of high quality teaching through multiple interviews and observations. Classroom observations showed that formative assessments played an important role in their lessons. Students were initially assessed and assessed again to ensure mastery learning. Students were grouped heterogeneously and assigned particular tasks that actively engaged each child. The teachers not only differentiated instruction, but made sure the content being taught was aligned to the Ohio Content Academic Standards.

Teacher F stated that she incorporated Bloom's Taxonomy in her classroom to ensure students were getting asked different level questions. Also, Teacher F said she has students write their own questions using Bloom's Taxonomy. Black and Wiliam's (1998) research on assessment showed that "formative assessment is an essential component of classroom work and that its development can raise standards of achievement" (p. 139). One major effect of the model was that teachers became cognizant of the importance of assessing students to gain information on their strengths and weaknesses. Student feedback is effective when used to pinpoint strengths and weaknesses in student work. Quality assessments produce accurate information that can maximize student performance (Stiggins, Arter, Chappuis, & Chappuis, 2004). The model positively impacted teacher assessment practices along with the principal instructional leadership involvement at the building site.

The framework that emerged from this study can be used as professional development model by building leaders. The National Council of Staff Development (2001) endorses the concept of teacher collaboration, which encourages teachers to work with each other to improve the learning of

all students. Without effective collaboration, the absence of sharing best practices and discussing student growth will set the tone for an ineffective school culture. In this study, the principal took the initiative to change the master schedule in order to allow teachers the time to engage in professional dialogue. The principal allotted time for teachers to collaborate and analyze student data folders for the purpose of analyzing student and teacher strengths and weaknesses.

Second, leadership in the 21st century places great demands on principals to serve not only as a manager, but also as an instructional leader who works closely with teachers to get them to try new strategies in the classroom. At the research site, the teachers commented on the principal's desire to be part of grade level and departmental meetings. Finding time in a busy schedule is often difficult for administrators, but in this study, the principal laid the foundation for a PLC, which eventually changed the school culture to one of collaboration.

The principal believed the school culture had improved with the implementation of the model. He reflected that "I see a more positive attitude, a happier staff, and I see students proud of their progress, proud of their "Excellent" Rating. He stressed, "There is a sense of pride for our staff and community and it's hard to put an estimation of what that can do for your entire school system." He also articulated that "teachers are now sitting down with each other to look at how their teaching can raise student achievement."

The utilization of job-embedded professional development provided teachers the opportunity to gather evidence of student achievement and to motivate learning. Just a few years ago, the concept of job-embedded professional development was not a practice. The principal took the initiative to widen a professional development model that eventually formed into a PLC. Thus, it became clear that a culture of collaborative teacher learning evolved at the

building level. As the principal took the model and transferred it to practical uses, so did the teachers. On the contrary, parents had limited knowledge of the model.

Conclusion

If all teachers and administrators understood the framework model, they could use it to improve their practice. Meaningful professional development is critical to the success of teacher effectiveness. Although value-added data is not used to evaluate teachers, it should be used, along with formative assessments, as a pertinent piece of evidence used to drive the instructional process.

Ohio recognizes the importance of using multiple key performance indicators for measuring student achievement, with one of those being value-added assessment. We are preparing all students to be successful and competitive in our 21st century workforce. Without effective teachers and administrators, we will have to settle for mediocrity. Fortunately, value-added data gives teachers an additional tool to identify student and teacher strengths and weaknesses. These results need to be discussed and analyzed in a school culture that promotes teacher collaboration for the betterment of all students.

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Tables

Table 1

Themes that Emerged from the Four Research Questions

Research Questions	Themes
1. How is value-added assessment being implemented and what does that mean to teachers, principals, and stakeholders?	<ol style="list-style-type: none"> 1. Strong building leadership helped teachers feel comfortable with the implementation of the model. 2. Value-added data was used to make pertinent instructional decisions. 3. A Professional Learning Community was established that gave teachers time to collaborate and analyze data in a non-threatening environment.
2. What is the context of Ohio's Value-Added Model?	<ol style="list-style-type: none"> 1. The teachers and principal had knowledge of the model. 2. A high level of trust existed between the teachers and principal in a culture supporting job-embedded professional development. 3. Parents had limited knowledge of the model.
3. What are the types and services?	<ol style="list-style-type: none"> 1. District Value-Added Specialist trainings were tightly organized and in-depth. 2. In-services on the model took place at the building level and facilitated by the principal and Teacher A. 3. The principal and teachers believed the trainings sessions were helpful and productive.
4. What are the effects of Ohio's Value-added Model?	<ol style="list-style-type: none"> 1. The teachers incorporated more formative assessments as a result of the model. 2. The principal was a transformational leader that changed the school's culture. 3. Parents did not have the knowledge to discuss the effects of the model.