

**IMPROVING DISTRICT PERFORMANCE
AND STUDENT LEARNING THROUGH A
STANDARDS-BASED FRAMEWORK
FOR TEACHING AND LEARNING***

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A. STANDARDS-BASED FRAMEWORK FOR TEACHING AND LEARNING

The Farmington Public Schools' standards for student learning define the skills, knowledge and understandings we believe all students need in order to become fully functioning well-educated citizens. Our standards provide teachers, students, parents, and the community with a clear definition of what students should know and be able to do upon their graduation and at key stages at each grade level and in each content area. This paper describes the framework for a standards-based system and a theory of action for the improvement process in the school system, the principles that support the system, and how standards are developed, implemented and monitored. Farmington standards are aligned with and embedded within the district philosophy and mission and provide a pathway for achieving the district's five-year goals. The district philosophy, mission and goals are as follows.

PHILOSOPHY, MISSION, and GOALS of the FARMINGTON PUBLIC SCHOOLS

Board of Education Philosophy

The Farmington Public Schools are committed to the belief that **all** children are capable of attaining high levels of educational achievement in preparation for productive, rewarding lives and responsible citizenship. Students will reach this goal through their own diligence and effort, and through a school and school district learning climate that responds to individual student academic needs, a curriculum that challenges, adequate resources, and skilled, professional instruction. Furthermore, a belief in social equality underlies Farmington's commitment to providing a high quality of education for all students.

School District Mission

The mission of the Farmington Public Schools is to offer a common standards-based educational program that will enable every student to achieve rigorous performance standards.

Board of Education Goals 2003-2008

- All Farmington students will meet *established literacy performance standards by demonstrating* high levels of communication skills in reading, writing, speaking, and listening; and all students will learn to be proficient in the use of technology to improve learning.
- All Farmington students will *meet established mathematics performance standards by strengthening* their understandings of basic mathematical concepts, relationships and operations, and *demonstrating* the ability to apply them to practical problem solving.
- All Farmington students will *meet established science performance standards by demonstrating* knowledge and understanding of natural laws and theories of the physical/life sciences by applying the scientific method to the investigation of natural phenomena.
- All Farmington students will *meet established social studies performance standards by demonstrating* their understanding of human affairs by acquiring knowledge of U. S. history and government, world history, geography and the principles of economics. In addition, students will demonstrate their appreciation for cultural achievement via exemplary literature and by developing their performance skills and related understandings in the disciplines of music and visual arts.
- All Farmington students will *meet established standards by cultivating* the habits of good citizenship, health and personal responsibility *by demonstrating the cooperative life skills necessary to be productive and responsible citizens in our diverse and complex world.*

Specific, measurable performance indicators associated with each of the district goals are identified and available for reference. Annual district, school and student performance information is collected and portrayed on each indicator for each goal. These data provide trend information as the district addresses and monitors its goals for continuous improvement.

B. SYSTEMIC IMPROVEMENT IN A STANDARDS-BASED SCHOOL SYSTEM:

A THEORY OF ACTION FOR SCHOOL/DISTRICT IMPROVEMENT

Improving student performance and learning opportunities for ALL students is the central goal of the Farmington Public Schools' commitment to continuous improvement. The Farmington Public Schools use a strategic planning process for continuous improvement to create interdependence among district and school improvement plans and priorities. The District Leadership Council and principal and teacher-led School Development Teams create school improvement plans and goals based on the ongoing student performance data. In this context, teams of teachers and administrators identify key building goals that regularly focus on improving reading, writing, and mathematics and other disciplines. To support these goals at the individual teacher classroom level, the teacher evaluation system requires teachers to connect their grade level goals to district goals. The Educator Evaluation and Professional Development (EEDP) plan relies on teams of teachers working together to use student performance data to design and monitor interventions to improve teaching, learning and achievement.

The theory of action that provides the foundation for the district's improvement work is grounded in the belief that the change process is a continuous one and should be strategic by its nature. Improvements should be driven by data—critical and multiple forms of information—that inform the school and district plan of action. The school district's theory of action includes the concept that the analysis of data needs to occur on every level of the organization—from teachers to principals to central office. Everyone has to “own” the efforts and initiatives for continuous improvement. Any improvement efforts need to be connected to the larger goals and expectations for the school district. Our theory of action is that meaningful instructional improvement is driven by the district's philosophy, mission and goals that are embraced and purposely acted upon by the professionals that staff the school system. Therefore, the knowledge base of the entire professional staff is both valued and harnessed as a critical variable for improvement.

The school system's theory of action has evolved, in that we are ever more aware of the importance of distributed leadership, of the need to involve multiple constituents through goal-oriented collaboration. All members of the school community must contribute to enable the district and all of its students to succeed. Moreover, the skills and expectations of collaboration are not automatic, that we can not make assumptions that “everyone does it” and knows what “it” means. Rather, learning how to engage in the collaborative process needs as much support, professional development and definition as the development of products, such as data systems that we are seeking to develop or use. The professional development processes around these concepts are necessarily as important to examine as the outcomes. Therefore, in order to support and sustain a standards-led school system, the knowledge base and expertise of teachers, teacher leaders, and administrators is crucial to support instructional improvement. A standards-based school system depends upon each level of stakeholder in the larger school community to ensure continuous improvement.

C. CORE BELIEFS

In addition to the district’s philosophy and mission, the district culture is characterized by a shared set of beliefs that have evolved over time. These core beliefs provide both purpose and direction to the district’s improvement work.

- **Strategic Planning for Continuous Improvement**

Our plan for continuous improvement must be strategic in nature—focused on key priorities that further the mission of the school system and that help all students to learn and achieve. It is an annual, continuous, and recursive process of identification of areas in need of development, of identification of goals, actions, and outcomes to demonstrate progress, improvement, and achievement. The school development process involves staff accountability and development, community support and commitment, resource alignment, and the promotion of high quality curriculum, instruction, and assessment to help all students to reach the district’s rigorous standards.

- **Organizational Alignment—A Learning Organization**

Efforts at continuous improvement align priorities from the district level, to the school, to the classroom. A clearly aligned set of purposes in the school development planning process support the mission and philosophy and promote schools as learning organizations. Because the mission, philosophy, and purposes are clear; priorities are focused and aligned. Staff can identify what efforts are aligned or not aligned and focus their work accordingly.

- **“Effort Creates Achievement” for ALL Students**

Teaching and learning are grounded in the belief that students are not born smart—they work hard to get smart. Our efforts for continuous improvement are driven by the belief that students can achieve when they work hard to meet established expectations and standards. Effort and not native ability creates achievement. We believe that with effort and perseverance, all children can master the challenging academic work described in our standards and that all students can learn to use their minds well. Our commitment to the learning of all students requires that we develop a variety of responses to students who struggle to meet challenging standards. Our teachers work to promote student effort and achievement and apply these same expectations to their own work.

- **Improvement Discussions are Data Driven and the Assessment of Student Performance includes Important, Measurable Outcomes Over Time**

To engage in continuous improvement requires that we gauge our success through the identification of key outcomes over time that reflect the attainment of district and school goals. Those measurable outcomes serve as a guide to determine where new priorities exist and where we must continue to work to help all children to succeed. In addition, our continuous improvement model rests on the importance of using classroom data to better diagnose student needs and develop appropriate interventions to support student learning.

- **District Resources Align with District Mission and are Flexibly Deployed in Support of the Mission**

A continuous improvement model can only be as effective as the implementation of the action plans. To implement those plans, our resources are used flexibly and align with the school district mission and philosophy.

- **The District Curriculum is Balanced and Aligned to Promote the Standards**

To ensure that the taught and assessed curriculum reflects the expectations of the standards, the curriculum, and the implementation of the standards must be continually monitored. Expectations for students are made clear through models, examples of student work, and through shared assessment of progress. Curriculum vertical teams support this effort at continual monitoring of curriculum to ensure that the curriculum is appropriately balanced and aligned across grade levels and content areas. Progress toward implementation of the standards is regularly assessed by the district K-12 Curriculum Vertical Teams. Teams carefully analyze and evaluate their discipline and the implementation of curriculum through this process. At each school, grade level and discipline-based teams continuously monitor the curriculum and student progress. The analysis of progress toward the standards is a significant step in the process of curriculum implementation and monitoring of a standards-based system. It is discussed in greater depth later in this paper.

- **Teaching is Standards-Driven and Learning Oriented**

Quality teaching is essential to promoting and sustaining an effective standards-led school system. Teaching to standards, or teaching for understanding, requires highly skilled professionals who work collaboratively to achieve success for all students. Teaching that is standards-based focuses on promoting essential understandings or the “big ideas” of the field. Teachers engage in continuous improvement through their grade level or course level teams. Together they examine students’ learning. Through analysis of performance data over time, examination of students’ work, and thoughtful instructional planning, teacher teams support one another to enhance their teaching and to achieve success through student learning. Through our teacher evaluation system, the Educator Evaluation and Professional Development Program (EPPD), teachers carefully examine student learning needs and progress, design appropriate instructional strategies and interventions, and monitor their work in progress.

The strategic planning process, the process of continuous improvement, school development planning, and teacher collaborative work, all form the foundation of a standards-based school system. The development of a standards-based system begins with the identification of the standards for success.

D. WHY DO WE NEED STANDARDS?

Standards clearly define what is meant by “high levels of learning” for all students.

The district standards are benchmarks for what youngsters in the highest performing school districts and countries in the world can accomplish in core subject areas. Our standards are meant to prepare our students to be productive citizens in a rapidly changing world that demands critical thinking and problem solving. Our standards—and the curriculum experiences leading to those standards—combine a deep understanding of subject matter with the capacity to apply what has been learned in real world situations. They communicate to parents, students, teachers and the community the expectations we hold for student learning.

Standards provide focus for the work of students, teachers and parents.

Farmington standards help our **school community** understand what students are expected to know and be able to do at each grade level in the core of academic subjects and they provide students, teachers and parents with a clear understanding of the quality of learning we expect as students move along the pathway to high school graduation and productive citizenship. Finally, they serve to coordinate and align the entire school system and its resources on clear educational outcomes.

Farmington standards help **students** know what is expected of them by providing clear, defined targets and examples of high quality work. This clarity, combined with support from teachers and parents, fosters the level of perseverance and effort needed for students to meet and exceed our standards. With this information, students can more accurately assess their own performance in relation to the standards and determine what they need to do to ensure that their work meets expectations.

Farmington standards help **teachers** by providing a focus for teaching, learning and assessment. When teachers are clear about the goals for their students, they can focus their time and energy on helping students improve their work in relation to these goals. In a standards-led school system, teachers align curriculum, assessment, and instruction to the standards so that teaching time is spent on that which matters most.

Farmington standards provide **parents** an opportunity to more fully participate in their child's education. When teachers provide parents with clearly defined expectations and models or examples of the work that is expected, parents are better able to understand and support their child's learning and progress at home and in the community.

Our standards provide a framework for understanding the expectations for all students in Farmington. By clearly stating what is expected, students, teachers, and parents alike are more informed and able to support the achievement of these standards. A standards-based school system is supported by a set of fundamental principles.

E. DEVELOPING A STANDARDS-BASED SCHOOL SYSTEM

The development of a standards-based school system is built upon indicators of success. These indicators are continuously revisited to assess the progress of the development of the district as a standards-led system. The results of that analysis are used to continue to shape the annual school and district development plans. These indicators are the benchmarks of success of a standards-led school system.

- 1. Standards:** Standards are articulated in all content areas, understood by parents, teachers, and students alike, and student achievement is monitored to ensure that all students meet and/or exceed those standards. Standards represent the essential understandings in the discipline and the content, knowledge and skills that students need in order to develop an understanding of and ability to apply their understanding of the disciplines.
- 2. Curriculum, Instruction and Assessment:** Assessment, curriculum and instruction are responsive to student needs and are aligned with the standards; assessment results drive curriculum and instruction; data on student achievement is used to allocate and align resources and support. Curriculum units and resource guides are developed, aligned with the standards and guide teachers toward resources and activities that support the learning of the standards. These units and guides have common assessments or assessment packages that allow students to demonstrate their knowledge, skills, and understandings. Teachers implement these units and utilize these guides across their grades and content areas, and assess student progress according to standards. Teachers' instruction is designed and delivered in a variety of ways, to help all students to achieve the standards. Data—student work and evidence of student progress—are collected to determine student progress toward standard and are used to inform instruction.
- 3. Professional Development:** Professional development is an integral part of the school improvement process, is viewed as a life long process and is appropriately supported; professional development focuses on the core issues of teaching and learning, it informs continuous improvement of teaching and learning, and fosters collaboration between and among professionals.
- 4. Stakeholders:** All stakeholders in the school community understand, believe, act on, and value standards and are committed to ongoing improvement; evidence that standards raise student achievement is widely disseminated.
- 5. Equity:** There is widespread implementation of strategies to address the needs of all learners and achievement gaps are closed; stakeholders support equal access and achievement of standards by all students.
- 6. Effort:** Teachers make the standards clear for students and students persevere at difficult tasks until they meet or exceed standards; a standards-led classroom functions like a learning community that support and nurtures students and their success.

To assist in monitoring these indicators in practice, a rubric to chart the district's progress is applied on a regular basis as both a formative assessment tool and a diagnostic process to prompt discussion and planning for ongoing improvements. This identification of the stages of development of a standards-based system enables the school district to continuously revisit the key principles of a standards-led system, monitor progress and development over time, as well as reinforce the core beliefs and expectations of this standards-led system as new staff enter and/or join the leadership in the school system.

The rubric illustrates a continuum from a non-standards led system, to a beginning system, one in transition, emerging, and finally, the attributes of the "Ideal" standards-led school system. The categories that are defined in this rubric: Standards; Curriculum, Instruction, and Assessment; Professional Development; Stakeholders; Equity; and Effort, all represent critical areas of development for a standards-led school system. By using the criteria to gauge our growth and development, we can better monitor our progress and focus our improvement efforts.

Standards

				Attributes of the “Ideal” Standards-Led School System
Non-Standards-Led System	Beginning	Transition	Emerging	Predominance
Achievement expectations vary for students.	Teachers generally are aware of how standards can improve achievement for all students.	Specific plans are in place which guide teachers in implementing district standards.	Communications about student progress in school (i.e. report cards) are presented in standards language which is understood by parents.	Standards are written in all content areas.
Students passed to next grade based on “seat time.”	Parents generally are aware of the need to become better informed about standards.	Stakeholders receive communication about standards-led education	Stakeholders related to the schools within a standards context.	Local standards reflect state and national standards.
Curriculum is based on a list of skills or selected textbooks.	Administrators and teachers understand that curriculum, instruction and assessment must be driven by established standards.	New/revised curriculum is framed in the standards-led (backward mapping) model.	Standards are written in most content areas.	Stakeholders understand the nature of standards and how they are different from traditional curriculum goals and objectives.
Achievement measures are reference to a score distribution rather than knowledge acquired.	Discussions are underway amongst teachers which focus on understanding standards and referencing student achievement to reach standards.	Data is collected to report student performance in relation to standards.	Teachers redesign curriculum and instruction and implement assessments to reflect a “backward mapping” model.	There is fluid use of standards-led education.
	Most teachers are familiar with and are using some performance assessments which reflect standards.		Modifications in curriculum, instruction and/or assessment are informed by student performance data relative to standards.	Standards, curriculum, instruction and assessment are implemented in core content areas using a backward design model.
				Student achievement is monitored to ensure that all students meet standard.

Curriculum, Assessment and Instruction

				Attributes of the “Ideal” Standards-Led School System
Non-Standards-Led System	Beginning	Transition	Emerging	Predominance
Focus is on teaching rather than learning.	Recognition that a standards-led system will require greater flexibility in instruction and learning time.	Curriculum is selected/developed to support standards achievement by all students	Assessment/curriculum and instruction are aligned with standards.	Assessment, curriculum and instruction are responsive to student needs and not constrained by traditional school structures (i.e. school configuration, length of the day and school year, grading system).
Textbooks and curriculum are seen as the same. Curriculum is revised according to a budget cycle.	Recognition that standards are integral to all curriculum and instructional decisions.	Significant changes in curriculum are considered in standards development.	Standards shape curriculum design, development and revision. Common assessments are available in each content area and grade assessment requires application of knowledge/skills.	Standards form the foundation of all curriculum and curriculum revision. Written documents are comprehensive, including standards to be taught, assessment packages, design for instruction, and identification of appropriate resources to lead to the standards.
Instructional practice is seen as a private issue rather than a public one.		Instructional practices are designed to help students meet standards.	Instructional practices are redesigned to reflect student needs identified through assessment. Instruction is generally reflective of the teaching standards.	The comprehensive teaching standards drive instruction. Teachers are well versed in the standards and instructional strategies and employ those to meet student learning needs. The improvement of instruction is shared in a community of practice; variations between classrooms are reduced.
Assessment is not aligned with curriculum or instruction.	Recognition of a need to shift from focus on teaching to focus on learning.	Assessments are developed to measure student progress toward standards.	Assessment is multifaceted and requires a body of evidence to verify attainment of standards.	Assessment is a recursive process, with assessment results driving curriculum and instruction and daily teaching.
	Stakeholders are given information about student achievement in relation to district standards.	Data about student achievement in relation to standards is collected and analyzed by stakeholders.	School-based level planning is guided by data on student achievement related to standards.	Data are used at all levels of the organization to inform practice. Communities use data on student achievement to allocate resources and assistance to schools.

Professional Development

				Attributes of the “Ideal” Standards-Led School System
Non-Standards-Led System	Beginning	Transition	Emerging	Predominance
Professional development consists of single, unconnected events which fill in-service training days.	Professional development helps teachers reach an understanding of standards-led education.	Professional development focuses on improving the teaching and learning process related to standards.	Professional development is an integral part of school improvement and is supported through teacher assignments, time, resources, information and incentives.	Professional development is viewed as a lifelong process where teachers use resources (time, money, etc.) creatively.
Districts provide little time or resources for ongoing professional development within schools.	Professional development is determined by the administration.	Professional development helps teachers understand content standards and draw implications for changes in curriculum and instruction.	Teachers implement knowledge and skill that result from standards related professional development.	Professional development focuses on the core issues of teaching and learning, analyzing student work in relation to standards and is embedded in the day-to-day work of the school district.
	Ongoing professional development in instructional strategies is provided for teachers.	Professional development is linked to teacher needs.	Professional development is planned collaboratively by teachers and administrators and is based on district and school goals as well as individual needs.	Professional development is structured deliberately to foster collaboration amongst professionals.
	Professional development reflects best available research and practice in teaching and learning.	New measures and evaluation strategies are developed to assess impact of professional development on student achievement.	Inquiry, reflection and planning are valued as professional development activities.	Professional development uses teacher talent to develop curriculum and assessments within a standards framework (includes study groups, peer coaching, action research, feedback and evaluation).
				The impact of professional development on student learning is thoroughly evaluated and is used to inform continuous improvement of the teaching and learning process. There exists a planned pathway of professional development for each teacher in each content area.

Stakeholders

				Attributes of the “Ideal” Standards-Led School System
Non-Standards-Led System	Beginning	Transition	Emerging	Predominance
Flow of information is one way—top down.	Public opinion surveys are conducted to understand public attitudes/dispositions.	Stakeholders are involved in policy and improvement discussions.	Stakeholders can express a rationale for a standards-led system and are supportive.	Stakeholders believe, act on, and value standards.
There is no formal plan to engage the public in determining the reforms.	Research-based information on standards is collected and shared with key stakeholders.	Standards reflect stakeholder beliefs/values.	Key messages about and examples of standards-related improvements are shared with stakeholders.	Information flows freely among policy makers, public educators, parents, and business leaders.
Special interest groups are ignored.	Leaders link public concerns with standards-led reform issues and encourage dialogue.	High quality communication materials are created, disseminated, and discussed with stakeholders.	Stakeholders can articulate and show understanding of standards.	Stakeholders are committed to and involved in ongoing improvement.
Concerns of the public are rarely anticipated.		Teachers are able to communicate with stakeholders about standards.	Standards are part of regular parent/teacher/student communication.	Evidence that standards raise student achievement is widely disseminated.
		Standards are linked to commonly understood performance indicators (e.g. CMT, CAPT).	There are ongoing exhibitions of high level student work that demonstrate standards.	

Equity

				Attributes of the “Ideal” Standards-Led School System
Non-Standards-Led System	Beginning	Transition	Emerging	Predominance
Students held to difference academic standards.	There is a growing awareness that gaps exist in student achievement.	Achievement data are disaggregated to identify potential gaps in student achievement.	There is widespread implementation of strategies designed to address the needs of all learners.	Achievement gaps are closed.
Significant gaps exist between high and low achieving students.	There is a growing awareness of the importance of high expectations for all students.	Stakeholders believe in the importance of equity and its impact on all students.	Time and resources are allocated to ensure that all students meet standards.	Stakeholders support equal access and achievement of standards by all students.
Bell curve justifies low expectations for some students.	Teachers expand their teaching to teach a diverse classroom of students.	Policies to support equity are debated.	System accounts for gaps in student achievement.	Opportunities and resources are in place to support learning for all students.
Structures support unequal distribution of power, resources and opportunities.	Stakeholders review information and research on policies and practice which close achievement gap.		Stakeholders understand that equity is a core issue that permeates all aspects of a standards-led education.	
Student achievement data is not disaggregated.	Few resources are targeted to closing the achievement gap.		Policies are aligned to support equity.	
Student tracking limits opportunities.				

Effort

				Attributes of the “Ideal” Standards-Led School System
Non-Standards-Led System	Beginning	Transition	Emerging	Predominance
Student doesn't realize that effort matters. Teacher believes in ability, not effort.	Student knows he/she has to give effort, to try, but student is unaware of the components of effort (time, strategy) and the role they play.	Move towards a standards-led report card which describes the attributes of effort and assessment.	Teacher makes clear the standard for students.	Students persevere at difficult tasks until they meet or exceed standards.
Student doesn't understand goals/outcomes. Students let “teacher do the work.”	Students begin to understand outcomes and begin to learn strategies.	Teachers begin to set expectations for effort (draw out partial answer).	Students understand standards and know what quality work is.	Students frequently assess their own work in relation to standards.
Teacher teaches to grades, not standards. Student works for grades, not to meet standards. Assessment is used summatively.	Teacher states need for effort (“try hard”) rather than providing instruction about effective effort. Teacher and student understand that there are strategies that make effort effective.	Teacher provides some feedback to students on quality of work pertinent to standards. Teachers teach/model strategies that make effort effective.	Teacher enhances the role of guided practice in the classroom, provides timely and specific feedback, assists with revisions, coaches students and allows opportunities to improve performance.	Teachers provide frequent feedback to students in relation to standards. Teachers provide multiple opportunities for students to revise their work in order to meet standards.
Students don't feel safe enough to take risks—class/school is judgmental.	Students need to be safe and supported but opportunity to take risks is limited.	Students have some opportunities to practice strategies and to take risks.	Students have multiple opportunities to practice strategies and to take risks.	A standards-led classroom functions like a learning community that supports/nurtures everyone.
Assessment is used to sort/classify—students perceive it as such. Staff believes only some can and will learn at high levels.	Dissatisfaction with student performance data, grades and other assessments develop.	Assessment begins to shape instruction and it is well aligned with instruction.	Teacher uses some assessments formatively.	Teachers assume responsibility for learning; uses assessments regularly to shape instruction.
Community is unaware of or doesn't support district standards. Limited support for changes in curriculum, assessments, professional development opportunities to learn.	Limited support for needy students. Some parents are concerned that “we're pushing kids too hard.”	Some extra support programs are available. Community support for standards is evident.	Community supports summer school and other supports. Acceptance of “extra-time” concepts is growing.	Community understands the role of effort in a standards-led system including the need for extra time for learning for some resources.

F. HOW ARE STANDARDS DEVELOPED?

Farmington standards are developed through a thoughtful process that engages the faculty and administration in examining the “big ideas” and organizing features of a discipline as well as the specific knowledge and skills embraced by that discipline. Standards documents developed at the national and state level were used as resources when designing Farmington's standards.

Our standards reflect what we know about best practice and current learning theory. They are critiqued by experts in the field as well as by educators in other high performing districts. By using “critical friends” or experts in the field, such as university faculty, researchers, and practitioners, we ensure that our standards reflect the best thinking in the field. We aim to raise student achievement in Farmington to the levels demonstrated by the best performing countries in the world.

Our standards balance depth and breadth of ideas and incorporate the skills and understanding necessary for success on important tests such as the CMT or CAPT. Farmington standards create a well-articulated pathway for learning as students move from the elementary school through the middle grades and high school. However, the knowledge base of a discipline is dynamic and as such must be continually monitored and revised as necessary to appropriately reflect trends, shifts, or developing knowledge bases or theories. Our standards are continuously revisited in order to remain contemporary and responsive to the field of study, current research, and emerging trends in the discipline.

The first step in developing standards is to identify the **essential understandings** or “big ideas” or the enduring ideas at the heart of each discipline. The essential understandings, which are derived from the national and state standards, as well as local knowledge and expertise, are the knowledge, skills and understandings that we believe are important for all students to learn as a result of a K-12 education in Farmington. Because they are “essential,” the big ideas have an enduring quality and are likely not to change appreciably over longer periods of time.

Each year, students make progress toward the essential understandings by working toward **content standards**. Content standards describe what students should know and do at certain intervals such as grade levels or grade level clusters in relation to the essential understandings. They are made explicit through models and examples of student work that represent the standards. These models and examples that meet the standards are called **performance standards** or benchmark performances.

Curriculum units and curriculum resource guides are designed by Farmington teachers in a standards-led format. Each of these documents lists the essential understandings and content standards that are the desired outcomes of instruction. When appropriate, unit outcome statements are written to put the larger ideas into the context of a specific unit and describe specifically what a student will understand as a result of the course or unit. Essential questions are written to guide the students’ inquiry and work in the unit. The core knowledge and skills, or the key facts, concepts, principles, skills and processes that are necessary to help students to

reach the desired understandings, are identified. Assessments and learning experiences are then created to align with these standards-based expectations.

Assessments are designed to measure whether or not students have achieved performance standards. They provide evidence of student understanding in relation to the standards and require that students can use their knowledge to perform challenging tasks. These assessments are used to evaluate student progress toward meeting the established content standards. To determine whether or not students have met performance standards generally requires a “body of evidence” or multiple assessments. The evaluation of this progress is recorded in students’ progress reports or report cards.

Learning experiences are developed to ensure that students have the skills and understanding necessary to succeed at challenging assessment tasks. These learning experiences are designed with “the end in mind,” using a “mapping backwards” approach to ensure that students have adequate and varied learning experiences that will allow them to meet the performance standards. Mapping backwards means that the first step is to identify what is the desired outcome or what is the essential learning or understanding that we want our students to acquire. When that desired learning is clear, then and only then do we begin to identify both how we will know that students have acquired what we have specified that we want them to learn. Then, we begin to define the learning experiences that students need in order to ensure that they will all reach these standards or expectations. These learning experiences are aligned with the standards and prepare students to meet the assessment challenges and demonstrate the knowledge, skills, and understandings of the various disciplines. These learning experiences are articulated in curriculum units written in each discipline. The units connect the essential understandings, content standards, performance standards, assessments, and learning experiences together.

In other words, essential understandings answer the question, “Why should we study the discipline? Why is this essential to learn?” Content standards answer the question: “What content, knowledge or skills do students need in order to develop their essential understandings of the discipline?” Performance standards clarify for students how well they are doing in relation to the standards. Performance standards answer the question: “How well do students demonstrate their understanding? How does it look?” Meeting a performance standard is more than achieving a grade. A performance standard should reflect a specific level of performance that can be characterized by specific qualities, understandings, and application of skills. Performance standards are often described in a rubric or as a body of evidence.

A variety of assessments have been designed to answer the question, “How will students demonstrate what they know, understand, and can do?” The assessment task or tasks prompt students to demonstrate that understanding. The curriculum units, assessments, and guides that Farmington teachers create are designed to help teachers to answer the question of “How do I teach to these standards?” This curriculum development and design work helps teachers to enable all students to achieve these essential understandings, develop content knowledge, skills, and strategies, and to demonstrate their understanding through performance standards prompted by various assessment tasks.

Standards and the Essential Questions That They Help to Answer:

Standards	Answer the question....
Essential Understandings	Why should we study the discipline? Why is this essential to learn?
Content Standards	What content, knowledge or skills do students need in order to develop their essential understandings of the discipline?
Performance Standards	How well do students demonstrate their understanding? How does it look?
Assessments	How will students demonstrate what they know, understand, and can do?
Curriculum Units	How can teachers help students to develop this knowledge, skill and understanding?

The standards and the essential questions that they help to answer form the foundation and the framework for standards development. By seeking to answer these questions, it allows the school district to clarify curriculum expectations at every level. By clarifying expectations for teachers, we simultaneously clarify expectations for students as well, supporting each stakeholder in with the standards-based system. Each teacher is then able to explain his/her curriculum expectations, essential understandings, content standards, performance standards, and assessments, allowing for a common set of expectations for student learning.

G. HOW DOES THE SCHOOL DISTRICT IMPLEMENT STANDARDS ACROSS GRADES AND SCHOOLS?

In order to support and strengthen standards-based teaching and learning, teacher and administrator leadership and collaboration are critical. The Farmington Public Schools rely on the concept and structure of distributed leadership. The concept and use of the principles of distributed leadership have been influenced by the work of Richard Elmore Professor, the Graduate School of Education, Harvard University and Senior Research Fellow, Consortium for Policy Research in Education. He writes about distributed leadership in (2000) *Building a New Structure For School Leadership*:

Distributed leadership, then, means multiple sources of guidance and direction, following the contours of expertise in an organization, made coherent through a common culture. It is the “glue” of the common task or goal—improvement of instruction—and a common frame of values for how to approach that task—culture—that keeps distributed leadership from becoming another version of loose coupling...” (p. 15).

Important improvements in curriculum, instruction, and assessment are primarily initiated, implemented, and supported by both teacher leaders and school and district administrators. Curriculum development and implementation must be carefully monitored and evaluated to support standards-led curriculum implementation. To support this effort, collaborative teams are organized at a variety of levels throughout the schools and the school system to accomplish the work. The following describes the key collaborative teams that support curriculum implementation in Farmington.

District Leadership Council:

The District Leadership Council, under the leadership of the Superintendent of Schools, includes the entire team of school administrators. Together, the administrative team is responsible for developing a coherent and consistent vision for quality instruction, to foster the mission and goals of the Farmington Public Schools. In their collective administrative roles, the team works together to facilitate the development of teacher leadership, expertise, and team functioning. The DLC focuses their work on using data to lead organizational improvement, engaging in the school development planning process for school and district improvement, and focusing on the strengthening and improvement of instruction and curriculum. The team regularly engages in professional development experiences to strengthen their collective knowledge base and to build a community of practice. For example, the DLC conducts “walkabouts”, spending several hours together in one school, focusing on the development of particular dimension of instruction, observing and discussing teaching and learning behaviors. The team also examines performance results together and uses those results to inform decision making. Many members of the DLC also lead curriculum vertical teams. The DLC is a critical leadership team that is responsible for leading the many teams that exist both within and between school buildings. Their leadership and their role in developing leadership capacity across the school system, lays the foundation for distributed leadership in a standards-led school system.

Curriculum Coordinating Council:

In addition, the Curriculum Coordinating Council is responsible for **districtwide** coordination of curriculum and implementation. The Council includes school administrators, faculty, and a representative from the Board of Education Curriculum Committee. This Council works with the Assistant Superintendent to ensure that there are opportunities for integration of curriculum across subject areas, and that the district has a long range and systemic plan for curriculum renewal. The Council also monitors the development and implementation of the K-12 subject areas' standards across grades and subjects and provides feedback to the Assistant Superintendent regarding the structures that support curriculum implementation.

Curriculum Vertical Teams:

Curriculum Vertical Teams are K-12 teams designed to accomplish town-wide curriculum coordination and articulation. They are structured to ensure that all schools and key leadership roles are represented and that teachers and administrators alike have a role in making curriculum decisions for their various disciplines. For example, the teams include principals, town-wide reading, writing, and mathematics consultants, resource teachers, department chairs, and representatives from each of the elementary schools. The teams engage in the following work:

- **Analysis of issues** in curriculum implementation: the teams' primary function is to analyze the effectiveness of the implementation of standards-based curriculum. The teams identify key issues and needs across the grade levels. The teams prioritize issues and determine whether action needs to be taken or projects initiated. The teams may recommend that ad hoc committees be established to accomplish particular tasks. The teams engage in problem solving to address critical needs and issues in their disciplines across grade levels and schools. Teams regularly analyze the standards, work on better aligning standards and curriculum, and assess the implementation.
- **Ad hoc committees** are established to address the issues, challenges, or needs that were identified by the vertical team. This enables the appropriate and key individuals to be involved. Ad hoc committees may have short agendas, such as developing a particular grade level assessment, or may require longer term action, such as an in depth analysis of a particular portion of a program. The purpose is to have a clear focus for the committee's work and for the committee to accomplish a specific identified task. Ad hoc committees also allow for broader teacher participation depending upon the nature of the issue at hand.
- Curriculum Vertical Teams also identify and develop **long range plans** for curriculum implementation. Teams evaluate the standards, examining curriculum alignment issues, balancing of the standards across grades and levels, suggesting revisions to curriculum documents, identifying the need for writing new curriculum, and suggesting needed professional development. It is a cyclical process and as such, curriculum implementation must be constantly monitored and evaluated to ensure appropriate alignment and balance of the curriculum standards. These long range plans provide the template for continued re-visitation of the strength of the standards themselves. The

teams monitor the status of curriculum design and development and consider action steps to better strengthen the standards.

Professional Development:

To effectively implement standards-led curriculum requires both professional development and collaboration at each level of the organization. Some key areas include:

- **Developing the leadership capacity to support standards-led curriculum, instruction, assessment and learning.** Administrators are provided with professional development that supports the development of a coherent and consistent vision for quality instruction. Through shared learning experiences, such as “walkabouts”, that is, focused time as a leadership team in one building, observing teaching and learning and developing a common lens for identifying teaching standards in action, administrators develop a coherent set of expectations for teaching and learning. This shared vision is promulgated throughout the school system and becomes reflected in teacher evaluation and supervision through the work of building administration. Moreover, to support the development of leadership capacity, the leadership team engages in professional development to support the facilitation of teacher leadership and expertise and team functioning. The team and collaborative approach are essential in a standards-led system. Time is dedicated to examining how teams function, what to do when teams are less than effective, and how to maximize team time. In addition, data and its use is a central focus of professional development for the district wide leadership team. The use of data to inform instructional decision making is then applied to across the school system. Professional development time for school administrators is essential to support data use at each level of the organization and forms the foundation of school improvement efforts.
- **Developing teacher understanding of the essential understandings, content standards.** Teachers are provided with opportunities to examine the standards, to consider the content that they teach and what it means to teach toward “big ideas” or the concepts and knowledge that define a specific discipline. Some of these standards require additional professional development in the content to help teachers to strengthen their content knowledge base. For example, a new unit in simple machines for fifth grade teachers may be supported by professional development from an expert in physics to help teachers to develop a knowledge base that enables them to teach the content more fully.
- **Developing teacher understandings of the performance standards and expectations.** The establishment of performance standards requires the development of a collective understanding both of the nature of the content standard itself and of what it means to meet standard. To accomplish this, teachers are provided opportunities to work together to analyze student work and progress. Through the use of professional development days, faculty meetings, and team meeting time or common planning time, teachers work together to read and review student work and develop common understandings of the necessary “body of evidence” to determine whether or not students have met our performance standards. These teacher dialogues and explorations of student work are an essential step in developing performance expectations. Moreover, this process is iterative as teachers continually build and strengthen their understanding of complex student performances.

- **Developing teacher understandings of assessments and using assessment data to improve teaching and learning for all students.** To support the implementation of a standards-led curriculum, professional development experiences are provided to help teachers develop strategies for teaching to the standards. The assessments that students complete represent student understanding, or lack of understanding. Therefore, professional development experiences are designed to include explorations of the range of assessments that will be used to evaluate student progress. These experiences, such as using a “tuning protocol,” a structured process to examine student work, provide targeted opportunities for teachers to dialogue with one another regarding particular student performances and the challenges that these performances present. Teachers examine student work, generated through authentic performance tasks that will cause students to demonstrate their understanding of the essential understandings. Teachers need support for how implement those performance assessments and how to use the results of an assessment to inform instruction. Careful analysis and diagnosis of student understanding, student misunderstanding, and student learning is critical to effective teaching and learning in a standards-led system.
- **Holding teachers accountable for standards-led curriculum implementation.** Farmington’s Educator Evaluation and Professional Development Plan links teacher evaluation to student achievement. It provides a critical connection between school and district goals, curriculum standards, teaching standards, professional development and School Improvement Plans. Through this teacher evaluation plan, teachers establish collaborative goals based on student performance needs that represent student progress toward the standards. By implementing interventions, monitoring student progress and developing new learning through professional development, Farmington teachers work collaboratively to help all students to meet and achieve Farmington’s standards. This teacher evaluation structure supports the necessary collaboration and professional development experiences, focused on instruction, assessment, and student learning, that are necessary to be a high performing standards-led school system.

Curriculum Development:

An annual Summer Curriculum Institute is held by Farmington teachers, for Farmington teachers, to support the writing and revision of curriculum units. This institute allows teachers to work together, using strong models and examples, and highly trained and skilled teachers and coaches, to develop curriculum units of study. These units include the components part described above. In addition, teachers participate with district leadership in the crafting of assessments and the establishment of performance standards at various grade levels and intervals. Farmington’s teachers are closely involved in each step of curriculum development and implementation. Units that are written in the summer institute are then reviewed by the teacher trainers and principals and feedback is provided to curriculum writers prior to approval by the assistant superintendent for implementation.

H. HOW DOES THE SCHOOL DISTRICT KEEP DEVELOPING AS A STANDARDS-LED SYSTEM? A CYCLE OF CONTINUOUS IMPROVEMENT

In order to continue to evaluate our effective implementation of standards across the disciplines, the curriculum vertical teams and various departments annually evaluate the progress of the implementation of standards. The evaluation of curriculum is also a continuous process, which does not call upon a multi-year cycle of curriculum revision. Rather, curriculum is continuously assessed and examined to determine what needs improvement, alignment or balancing. The indicators of standards curriculum development are listed below. The attached charts summarize the work to date by discipline. The teams derived the criteria for effective standards-based curriculum. They defined three levels of development.

Level One development indicates that this area of curriculum development needs significant work in order to become standards-led. It is considered “below” our standards-based expectations. It may be that the area was overlooked or did not keep pace with the field or emerging new issues. It may be that this area was omitted or the timing was not appropriate to accomplish the work at the time. However, it indicates an area in need of significant curriculum work. Level Two development indicates standards-led development that is emerging. It is “near” our standards-based curriculum expectations, however the work is still emerging or evolving. Drafts may be in place, work in progress, however it does not yet fully meet our standards-based expectations. Level Three development indicates that the standards are in place and are driving the development work. Level Three suggest that the standards work is “complete and comprehensive;” however, part of being complete is recognizing the importance of continuous review and “tweaking” of the work. However, the majority of the work is in place.

The indicators of development include: standards; unit or resource guide development; curriculum alignment; assessments; data collection; curriculum implementation; and instruction/teacher practice. What follows is a definition of each. **Standards:** The written essential understandings, content standards, knowledge and skills that define each discipline and expectations by grade or grade-groupings. The standards form the foundation of all curriculum work. **Unit or resource guide development** refers to the writing of curriculum that is standards-driven. Units include three stages of design, including identification of the standards and essential questions of the unit, the assessment package where students will demonstrate their knowledge, skills, and understandings, and the instructional plan to lead to the student learning. In some cases, resource guides or instructional planning guides are used to develop curriculum. These guides must also be standards-driven. **Curriculum alignment** refers to the examination of the curriculum standards within and between grades. Teams must map their curriculum across the grades, to discern whether or not particular standards are taught, and if those standards are addressed appropriately within and between grades. **Curriculum Implementation** refers to the degree to which teachers use the written curriculum documents and whether data are collected on the implementation of the units. **Data Collection** refers to the data that are collected on the student performances within particular units, such as benchmark assessments and performances, to monitor student performance over time. **Instructional design** refers to the degree of articulation of the types of teaching strategies that support the achievement of the written curriculum. In other words, the curriculum standards are supported by the teaching standards.

INDICATORS OF DEVELOPMENT	<u>Level One:</u> Significant Work Still Needs to Be Done to Become Standards-led	<u>Level Two:</u> Standards- led Development is Emerging/Evolving	<u>Level Three:</u> Standards-led Development is Complete and Comprehensive
Standards	State or national standards are evolving; no written standards exist	A working draft of the standards exists in the district; the standards are somewhat developed and may inform some curriculum design	The standards are developed and are current with key state and national standards; the standards are used to design curriculum units and instruction
Unit or Resource Guide Development	Unit or resource guide development is inconsistent	Some standards-based units and resource guides are written.	Most if not all units and resource guides are developed, revised periodically, and are accessible in the curriculum database
Curriculum Alignment	The curriculum is not aligned across the grades	The curriculum is somewhat aligned and balanced (that is, appropriate amounts per grade, appropriate across the grades)	The curriculum is aligned and balanced (that is, appropriate amounts per grade, appropriate across the grades) and increasingly rigorous.
Curriculum Implementation	The curriculum unit or guide implementation is inconsistent or unclear	The curriculum or unit guides are implemented in most classrooms; results of the implementation are not collected/used to guide future curriculum revision. Standards are beginning to be visible in instruction.	The curriculum or unit guides are implemented in all classrooms; results of the implementation are collected systematically and used to guide future curriculum revision/design. Standards are clearly visible in instruction.

Assessments	Assessments vary and are not standards-based	Many assessments are standards-based and are common across most classrooms; some assessment criteria are linked to the standards and/or may not be consistently applied	Major/key assessments are standards-based and common across classrooms and are used strategically; assessment criteria are linked to the standards and consistently applied across classrooms
Data Collection	No or limited assessment data are collected on student performance	Some assessment data are collected and used for curriculum and instructional improvement in some classrooms	Assessment data (benchmarks) are collected over time and are used for curriculum and instructional improvement across all classrooms
Instructional Design	The instructional design in the curriculum is not standards-driven	The instructional design in the written curriculum is somewhat driven by the standards that students are expected to achieve and may reflect some teaching standards.	The instructional design in the curriculum is driven by both the standards that students are expected to achieve as well as student needs, and identifies key teaching strategies that lead all students to understanding and high levels of performance.

At the start of the school year, annually, the vertical teams analyze their progress in the indicators of development. They consider evidence and data related to standards, unit or resource guide development, curriculum alignment, curriculum implementation, assessments, data collection, and instructional design. They then use this tool to shape both short term and long term goals, to recommend ad hoc committee work, and to guide their own work and progress throughout the school year. Each fall, Central Office staff report to the Board of Education regarding the progress in standards-based curriculum design and development. The attached charts are completed by the teams and then shared with the Board of Education. The results of the vertical teams' analysis forms the foundation of the Program Development Plan for the Central Office.

FARMINGTON PUBLIC SCHOOLS: DEVELOPMENT AS A STANDARDS-LED SYSTEM

Standards Implementation Update, February 2005: Summary Page

INDICATORS	READING								WRITING							
	K-2	3-4	5-6	7-8	9	10	11	12	K-2	3-4	5-6	7-8	9	10	11	12
Standards																
Unit Development																
Curriculum Alignment																
Curriculum Implementation																
Assessments																
Data Collection																
Instructional Design																

INDICATORS	MATHEMATICS								SCIENCE							
	K-2	3-4	5-6	7-8	9	10	11	12	K-2	3-4	5-6	7-8	9	10	11	12
Standards																
Unit Development																
Curriculum Alignment																
Curriculum Implementation																
Assessments																
Data Collection																
Instructional Design																

INDICATORS	SOCIAL STUDIES								HEALTH							
	K-2	3-4	5-6	7-8	9	10	11	12	K-2	3-4	5-6	7-8	9	10	11	12
Standards																
Unit Development																
Curriculum Alignment																
Curriculum Implementation																
Assessments																
Data Collection																
Instructional Design																

Level 1: Significant work still needs to be done

Level 2: Standards-led development is emerging/evolving

Level 3: Standards-led development is complete/comprehensive

See previous page for further explanation of the indicators.

INDICATORS	ART								MUSIC							
	K-2	3-4	5-6	7-8	9	10	11	12	K-2	3-4	5-6	7-8	9	10	11	12
Standards																
Unit Development																
Curriculum Alignment																
Curriculum Implementation																
Assessments																
Data Collection																
Instructional Design																

INDICATORS	WORLD LANGUAGE								PHYSICAL EDUCATION							
	K-2	3-4	5-6	7-8	9	10	11	12	K-2	3-4	5-6	7-8	9	10	11	12
Standards																
Unit Development																
Curriculum Alignment																
Curriculum Implementation																
Assessments																
Data Collection																
Instructional Design																

INDICATORS	TECHNOLOGY								GUIDANCE							
	K-2	3-4	5-6	7-8	9	10	11	12	K-2	3-4	5-6	7-8	9	10	11	12
Standards																
Unit Development																
Curriculum Alignment																
Curriculum Implementation																
Assessments																
Data Collection																
Instructional Design																

Level 1: Significant work still needs to be done
Level 2: Standards-led development is emerging/evolving
Level 3: Standards-led development is complete/comprehensive

See previous page for further explanation of the indicators.

(SAMPLE) Vertical Team Documentation of Standards Implementation: Indicate Level and Commentary, if needed

Level 1: Significant work still needs to be done

Level 2: Standards-led development is emerging/evolving

Level 3: Standards-led development is complete/comprehensive (see rubric for complete explanation)

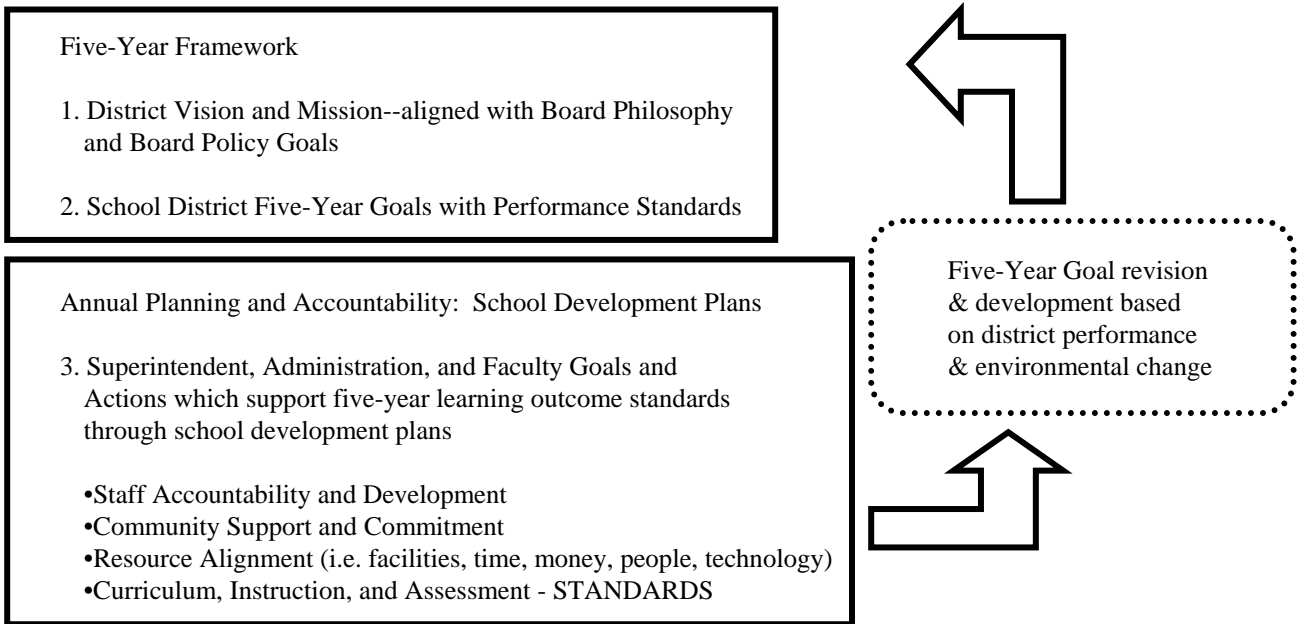
Vertical Team: Language Arts: READING

	INDICATORS						
GRADES/ COURSES	Standards	Unit Development	Curriculum Alignment	Curriculum Implementation	Assessments	Data Collection	Instructional Design
Kindergarten							
Grade 1							
Grade 2							
Grade 3							
Grade 4							
Grade 5							
Grade 6							
Grade 7							
Grade 8							

Grade 9: list courses							
Grade 10: list courses							
Grade 11: list courses							
Grade 12: list courses							

**I. SUMMARY: STRATEGIC PLANNING FOR CONTINUOUS IMPROVEMENT
IN A STANDARDS-LED SCHOOL SYSTEM**

The framework for a standards-based system, the district’s theory of action, core beliefs, and the principles described in this paper lay the foundation for the strategic planning cycle of continuous improvement that is necessary to support our ongoing standards work. As introduced in the first section of this paper, the strategic planning process is a five-year cycle of continuous improvement. It begins with the district vision and mission, which is aligned with the Board Philosophy and Board Policy Goals. The district’s five year goals and performance standards or indicators align with the board goals. Individual schools create their school development plans that are aligned with and emanate from the district goals. The school development planning process enables annual planning and accountability measures demonstrating progress toward the goals.



Building based plans are then supported by teacher teams in the Educator Evaluation and Professional Development (EPPD) plans, or teacher evaluation plans, that are also aligned with the school and district goals. The school development plans and connected teacher evaluation goals and outcomes help to shape the continuous improvement process. Articulating our standards, implementing those standards, and continuously monitoring our progress, are essential steps to improving district performance and student learning through a standards-based framework. The standards work holds great promise for increasing student achievement by focusing our efforts on important, clearly defined targets and by holding administrators, teachers, students, and parents accountable for results. However, standards alone do not guarantee higher levels of performance from students. We must continue our relentless pursuit of strategies and learning opportunities that will enable **all** students to master the rigorous, core academic curriculum and we must continue to provide opportunities for students to use the knowledge and skills they have learned to do important and intellectually challenging work. In this way, our standards work will continually add value to Farmington’s rich educational program.