WEST VIRGINIA

21st Century LEARNERS

Framework for High Performing 21st Century High Schools

"Learning for All . . . Whatever It Takes"

West Virginia Department of Education
21st Century Implementation Model

> "The well-being of the nation increasingly depends upon U.S. high schools rising to the challenge of preparing ALL students for a new economic reality."
>
> -U.S. Department of Education Spokesperson
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> "There are countless ways of achieving greatness, but any road to achieving one's maximum potential must be built on a bedrock of respect for the individual, a commitment to excellence and a rejection of mediocrity."
>
> -Unknown

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Foreword

For nearly three decades, the improvement of public education has been a centerpiece of America's political agenda. Starting with A Nation at Risk: The Imperative for Educational Reform (April, 1984) and most recently with No Child Left Behind, policymakers have grappled with how to bring about significant reform in public schools. Although progress has been made, many schools and school systems lag behind expected results. Morale among some educators has suffered; faced with greater and greater demands and more top-down initiatives, some voice a loss of pride and sense of efficacy in the very profession they love.

The compelling need to improve schools and school systems is certain. Although we are graduating more students from high school, better meeting the needs of students with disabilities and sending a higher percentage of students to post-secondary education, the need for graduates with higher levels of knowledge and skill has outdistanced our ability to produce these results. In the 1950s it was appropriate for only top students to transition to post-secondary education. Today, essentially all students must be prepared for some type of post-secondary credential: skilled certificate, two-year or four-year degree. The competition for jobs of the future brought about by economic globalization and digital technology make the ability to think and create the true currency of the 21st century.

How does the West Virginia public school system meet these demands? I propose three initiatives. First, we must refine our vision of the graduates we are to produce. Certainly, we must assure the basics of literacy and numeracy for all students. But we also must develop students who are competent in the ability to think critically, to apply knowledge at high levels and to use technology tools to assemble, communicate and analyze information. Second, we must develop a statewide approach to improvement that taps the creativity and enthusiasm of our talented educators. Given the appropriate conditions for collaboration and professional learning, West Virginia educators will rise to the occasion. This approach must involve time to meet and plan and use the sound processes of continuous improvement and systemic change. Third, we must align our vision across all stakeholders and remove the barriers to change. Disparate political agendas, development of conflicting policies and codes, and resistance to basic structural change are barriers to true systemic reform.

The Framework for High Performing 21st Century School Systems and the companion Frameworks for High Performing 21st Century Schools and Frameworks for High Performing 21st Century Classrooms are the foundation for these three proposals. These documents are the basis for a common language and a common vision of the culture, processes and practices of a great school system. It is my hope that they will become the guide for actions of schools and school systems throughout the state. The concepts embedded in these documents, if applied with the West Virginia spirit of optimism and determination, will not only unify our efforts and direct our action, but they will allow us to serve our students in a way that they deserve: prepared for success in the 21st century.

Sincerely,

Dr. Steven L. Paine
tate Superintendent of Schools

Rationale
Framework for High Performing
21st Century High Schools

There is no single recipe that prescribes how to become a high performing high school. Nor is there a single exhaustive list of all the ingredients. Improvement is highly contextual, dependent on the coming together of many factors. Policymakers have tried for decades to improve the quality of public education through prescriptions, primarily through measures that increase accountability and define such things as graduation requirements, curriculum standards and assessment procedures. Although progress has been made, most would agree that many schools have a long way to go to meet the academic rigor and the overall equity standard of "Learning for All" necessary for success in the 21st century.

What then can be done to significantly improve schools? Schools operate as part of a system. As such, they are heavily influenced by the culture, practices and processes of their state and local school district. Some of the very structural changes needed to improve high schools are outside of their immediate control. In some cases, improvement requires resources, policy changes and flexibility that are controlled by the local board of education and through state and federal policies. Certainly, there are outlier schools that defy the odds and bring about tremendous results for students. These schools have been studied over the decades and characteristics reported in the effective schools research.

To bring about wide scale improvement and to meet the new mission of "Learning for All," there must be true systemic change. This means aligning the efforts of the state education agencies, local school districts and, of course, principals and teachers toward (1) common agreement of the results to be produced and (2) the structures and processes necessary for achieving those results. The Framework for High Performing 21st Century High Schools is intended to define the high school's unique role in systemic change. This framework aligns with the district document, Framework for High Performing 21st Century School Systems, and describes conclusions from researching the country's best high schools and from reviewing the recommendations of several national and state reports on improving the American high school.

This document can be a valuable tool for high school administrators and teachers. First, it can create a vivid mental picture of how high performing high schools operate. Thus, it can be a basis for principals and teachers to analyze their own culture, practices and processes. Second, it can set the stage for high school staff members to work cooperatively with their local board of education and central office staff to restructure the school and change policies and procedures that may be impeding results. Third, it can align the district and school vision on the practices that need to be implemented thus preventing the top-down feeling that schools often have. Finally, it can be a basis for designing professional development at the local, regional and state level. Using this united and systemic approach, West Virginia high schools will move forward and perhaps lead the nation in producing graduates who are post-secondary ready and who have the skills necessary to find a productive place in the global digital society of the 21st century.

The High Performing 21ˢᵗ Century School

"A simple question to ask is 'How has the world of a child changed in the last 150 years?' And the answer is 'It's hard to imagine any way in which it hasn't changed.' Children know more about what is going on in the world today than their teachers often because of the media environment they grow up in. They are immersed in a media environment of all kinds of stuff that was unheard of 150 years ago, and yet, if you look at schools today versus 100 years ago, they are more similar than dissimilar."

Peter Senge, senior lecturer, Massachusetts Institute of Technology

The Urgency

The world in which students live has changed dramatically and schools must change as well. According to former Federal Reserve Board Chairman Alan Greenspan, there will be an evolving demand for 21ˢᵗ century skills in our economy: "Workers in many occupations are being asked to strengthen their cognitive skills; basic credentials, by themselves, are not enough to ensure success in the work place. Workers must be equipped not simply with technical know-how but also with the ability to create, analyze and transform information and to interact effectively with others. Moreover, that learning will increasingly be a life-long activity." As educators, we must prepare students for this kind of world.

The Characteristics

The characteristics of 21ˢᵗ century schools consist of the content and tools of teaching and also involve a philosophy about the way students should be taught and the student's responsibility in the learning process. All 21ˢᵗ century schools look at the broader economic, demographic and social trends in the state, the nation and the world and try to understand the context of the education they are providing. Whether the setting is rural like West Virginia or more suburban, these schools realize students need a curriculum built on the basics but one also rich in global awareness; financial, economic and business literacy; civic literacy; and information and communication technology.

But being a 21ˢᵗ century school involves more than changing the curriculum. An effective 21ˢᵗ century school sees the quality of the instructional process as key to student success. Thus, basic facts and basic skills are important to the extent that they provide a foundation for understanding complex issues, for solving problems, and for thinking critically and creatively. The instructional process is intentionally designed as a journey to deep understanding and application of that knowledge of relevant issues. This kind of instruction affects the design of instructional strategies, the quality of authentic assessments, the selection of resources and even the setting for instruction.

All 21ˢᵗ Century schools see that increasing numbers of students come to the public schools as "digital natives," able to navigate sophisticated applications of technology tools. Thus, these schools see technology as a way of life. Students beam writing assignments from their palms to fellow students for peer editing; they routinely prepare PowerPoint presentations, upload scientific data into graphing calculators for mathematical analysis, download graphics or video stream for assignments and even may interview a NASA scientist over the Internet. Guided use of these tools brings richness of understanding, relevance and creative energy into the school and classroom.

However, the most pronounced characteristic of the 21ˢᵗ century school is its view of the learner. Students living in a world constantly changed by technology must be life-long learners. Thus, 21ˢᵗ century schools focus on creating learners who are active and self-directed; who are given help in understanding their own learning styles; who are given choices in the learning process and clear guidance through rubrics on how to judge the quality of their own work. The 21ˢᵗ century school is truly about creating a community of learners, where students are guided partners in the learning process.

Mission of the High Performing 21 st Century High School

High performing high schools have a keen sense of mission and a deep understanding of the students they serve. They are specialists in teenagers, understanding their common traits but also appreciating and developing their individual differences. These high performing schools are diverse and complex organizations, helping students navigate through a high stakes period when academic and personal decisions can be life altering. These schools understand that a one size fits all conformity model is rarely successful; they look for ways to help every student feel a sense of affiliation with the school and to develop and refine every student's academic and personal talents. They understand that each student must be prepared to live in a competitive global economy. Thus, all students are guided and directed toward a rigorous academic program that prepares them for success in post secondary education (technical credential, two or four -year degree) and for living and learning in a high tech digital world.

THE HIGH SCHOOL LEARNER

Adolescents tend to know themselves, their abilities and talents, but often need guidance in knowing how to channel those abilities and talents. They are heavily influenced by peers and need the guidance of strong adults to affect good decisions. They are willing, and often do, focus on hours of training and competition in areas of interest, but tend to procrastinate with less appealing activities. They need guidance in time management and organizational skills with regular monitoring that helps them form positive habits for life.

Teens need opportunities to be proactive and self-directed in their own learning. They thrive in classrooms that allow reflection on their own learning and personal choice in assignments. While adolescence is a time of risk taking for physical and social-emotional ventures, many adolescents may shy away from the challenging, risk-taking classes. They use their prior knowledge to accomplish new tasks that encourage formal thought; their thought processes become more abstract and knowledgeable. They get bored easily with rote memorization but usually thrive in an interactive environment. Their time is critical to them; therefore, programs filled with busy work or meaningless activities cause teens to lose patience and interest. They are digital natives who use technology with ease and become more engaged when these are integrated into the learning process. The middle teen years are the time for exploration and preparation for careers. Therefore, work-based learning, introduction to majors and community service may assist adolescents in making decisions about their future.

Being provided opportunities to make decisions is key to the role of the adolescent. However, the decision-making should be structured with parameters. At this time in their lives, students may make major life-altering decisions, including things that will affect their health, their life and their future careers. Thus, a school environment that is personalized and allows for adult connections is imperative. Although the primary role of the high school is academic proficiency, the school also must be committed to the development of the whole student.
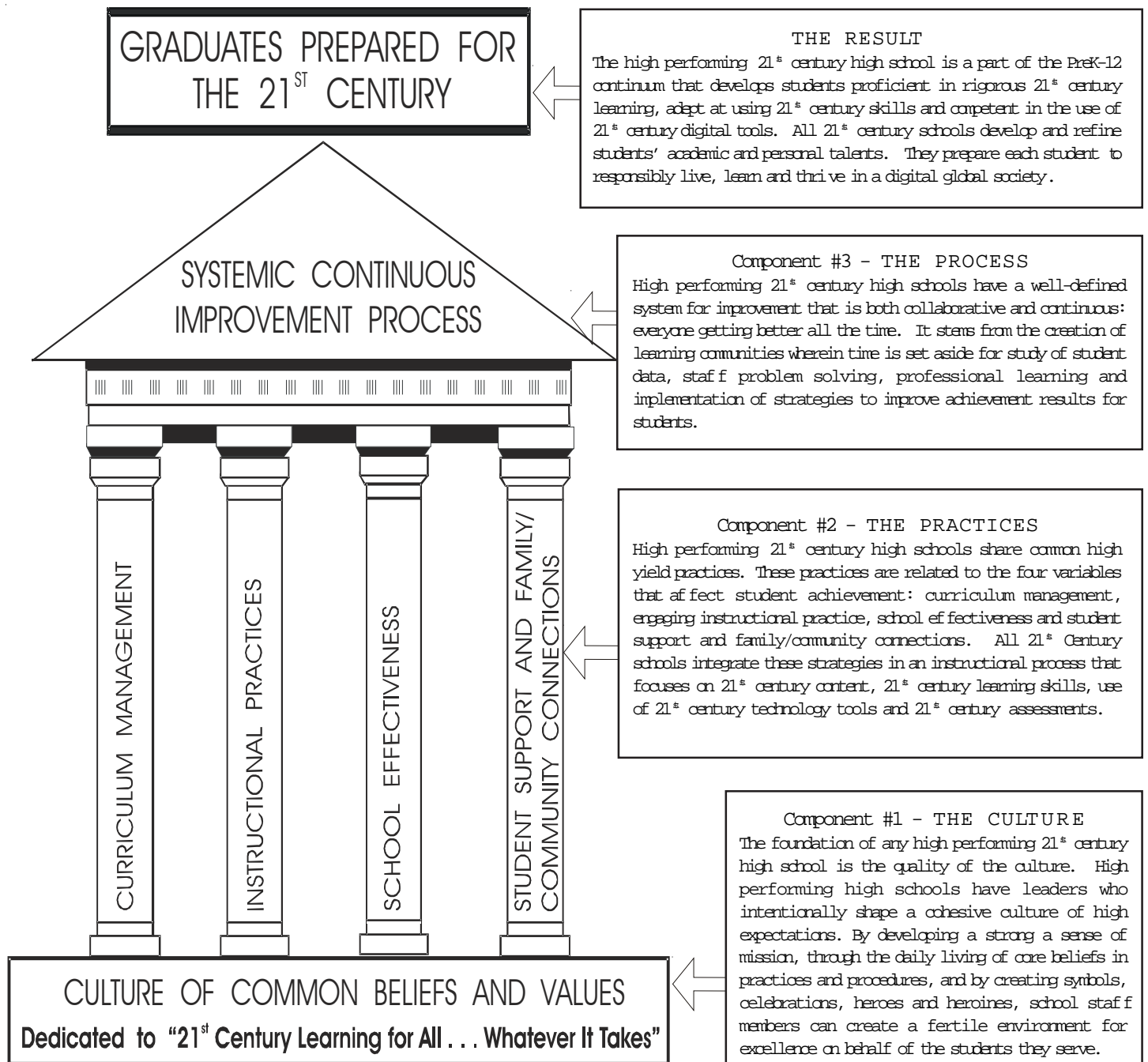
THE MISSION

The mission of the West Virginia high school is to graduate all students with 21st century knowledge and skills, prepared for success in an appropriate post-secondary education program and able to responsibly live, learn and thrive in a digital global society.

Framework Overview
The Three Components of a High Performing 21st Century High School

High performing 21st century high schools have in common three broad components (illustrated by the graphic below) coming together to produce quality results for students. First, they have a cohesive culture of high expectations for students and staff. Second, they share similar practices in curriculum management, instructional practices, school effectiveness and student support and family/community connections. Third, the leader has a personal and organizational commitment to systemic continuous improvement.

GRADUATES PREPARED FOR THE 21ST CENTURY

SYSTEMIC CONTINUOUS IMPROVEMENT PROCESS

Pillars:
- CURRICULUM MANAGEMENT
- INSTRUCTIONAL PRACTICES
- SCHOOL EFFECTIVENESS
- STUDENT SUPPORT AND FAMILY/COMMUNITY CONNECTIONS

CULTURE OF COMMON BELIEFS AND VALUES
Dedicated to "21st Century Learning for All . . . Whatever It Takes"

THE RESULT
The high performing 21st century high school is a part of the PreK-12 continuum that develops students proficient in rigorous 21st century learning, adept at using 21st century skills and competent in the use of 21st century digital tools. All 21st century schools develop and refine students' academic and personal talents. They prepare each student to responsibly live, learn and thrive in a digital global society.

Component #3 – THE PROCESS
High performing 21st century high schools have a well-defined system for improvement that is both collaborative and continuous: everyone getting better all the time. It stems from the creation of learning communities wherein time is set aside for study of student data, staff problem solving, professional learning and implementation of strategies to improve achievement results for students.

Component #2 – THE PRACTICES
High performing 21st century high schools share common high yield practices. These practices are related to the four variables that affect student achievement: curriculum management, engaging instructional practice, school effectiveness and student support and family/community connections. All 21st Century schools integrate these strategies in an instructional process that focuses on 21st century content, 21st century learning skills, use of 21st century technology tools and 21st century assessments.

Component #1 – THE CULTURE
The foundation of any high performing 21st century high school is the quality of the culture. High performing high schools have leaders who intentionally shape a cohesive culture of high expectations. By developing a strong a sense of mission, through the daily living of core beliefs in practices and procedures, and by creating symbols, celebrations, heroes and heroines, school staff members can create a fertile environment for excellence on behalf of the students they serve.

Component 1
The Culture of the High Performing
21st Century High School

The foundation of any highly effective school is the quality of the culture. Generally defined as the way we do things around here, culture is the underground stream of norms, values, beliefs, traditions and rituals that have built up over time as people work together, solve problems and confront challenges. These expectations and values shape how people think, feel and act in schools. Culture influences everything that goes on in schools: how staff dress, what they talk about, their willingness to change, the practice of instruction and the emphasis given student and faculty learning. Thus, culture is a powerful determinant of results and the degree to which school leaders attend to this determinant will ultimately shape the school's ability to improve.

Low performing schools have a significantly different culture than high performing schools. They value different things and thus behave in different ways than their high performing counterparts. These schools have, over time, become unproductive and toxic. These are schools where staffs are extremely fragmented, where the purpose of serving students has been lost to the goal of serving the adults, where negative values and hopelessness reign. Teachers who support change describe improvement meetings as battlegrounds where snipers and attacks are the norm. Negative staff effectively sabotage any attempts at collegial improvement. Toxic schools are places where negativity dominates conversations, interactions and planning, where the only stories recounted are of failure; the only heroes are anti-heroes.

In contrast to the toxic culture of low performing schools, high performing high schools have strong, positive cultures. These are schools

- where staff have a shared sense of purpose, where they pour their hearts into teaching and to doing their best to successfully transition all students to post-secondary opportunities;

- where the underlying norms are of collegiality, improvement and hard work; staff members feel an obligation to improve their skills and to be contributing partners in solving school problems;

- where rituals and traditions celebrate student accomplishment, teacher innovation and parental community commitments;

- where the informal networks of storytellers, heroes and heroines provide a social web of information, support and history of successful ways that the school has served the needs of students; and

- where success, joy and humor abound.

Strong positive cultures are places with a shared sense of what is important, a shared ethos of caring and concern and a shared commitment to helping students become productive contributors and learners in the 21st century.

The above descriptions are paraphrased from the work of Kent D. Peterson and Terrence E. Deal, How Leaders Influence the Culture of Schools

Component 2
High Yield Practices of the High Performing
21st Century High School
"The Four Pillars"

When determining strategies to improve classroom, school and school system effectiveness, professionals must answer one pivotal question: "What affects overall student achievement?" Or phrased in improvement terms, "What conditions do we control that can be altered to improve student achievement?" When answered, nearly all issues related to student achievement derive from four broad areas: (1) the quality of curriculum, "What we teach"; (2) the quality of instruction, "How we teach"; (3) the overall effectiveness of school, "Where we teach"; and (4) the unique characteristics and backgrounds of the students and the support of their families, "Who we teach." The quality of each area in a school or school system can either enhance or negate the overall level of student performance. Together these four variables provide a clear organizational model for classroom, school and school system improvement.

A review of research and best practices of high performing classrooms (informed by recommendations from the Partnership for 21st Century Skills) reveals significant commonalities among the practices of America's best teachers. Teachers who are closing the achievement gap, bringing increasing numbers of students to high levels of performance and using methods associated with 21st century learning share many similar approaches. Though different in specific detail and application, high performing classroom teachers understand and manage the curriculum, know how to design, implement and assess meaningful and engaging learning experiences, contribute to the overall effectiveness of the school, create and/or participate in support systems for students, and connect with parents and community in a meaningful way.

The charts on the following pages use these four areas as an organizational structure for displaying high yield practices common among high performing teachers. The charts provide a very brief description of each high yield practice; further definitions and explanations of these practices will appear in documents being designed to accompany this framework.

CURRICULUM MANAGEMENT

INSTRUCTIONAL PRACTICES

SCHOOL EFFECTIVENESS

STUDENT SUPPORT AND FAMILY/ COMMUNITY CONNECTIONS

Curriculum - "What We Teach"

To assure that all students are taught a rigorous 21st century curriculum, leaders of high performing 21st century schools:

☐ Implement a rigorous standards-based curriculum aligned with the West Virginia Content Standards and Objectivess (WV CSOs), including the 21st century content, context, assessments, learning skills and technology tools;

☐ Implement the district or school K-12 prioritized and mapped curriculum that gives priority to core concepts and essential understandings;

☐ Implement rigorous core graduation requirements for all students that include completion of a specific program of studies to prepare for post-secondary education and/or careers;

☐ Implement school-wide models of information and communication literacy and comprehension development, including reading to learn, vocabulary development, comprehension and use of digital technology tools in all subject areas;

☐ Establish a consistent school-wide writing model;

☐ Develop and support school-wide focus on graduating 21st century learners with a strong knowledge base in the core subjects with proficiency in global awareness; financial, business and economic literacy; civic literacy; and health and wellness;

☐ Implement and monitor a 21st century balanced assessment system that includes classroom assessments, benchmark assessments and summative assessments;

☐ Develop and monitor a process that integrates quality work-based and/or experiential learning experiences into all subjects to enhance the relevance of the curriculum to high school students;

☐ Establish a quality curriculum that includes rigorous elective offerings (e.g., honors, Advanced Placement; International Baccalaureate; honors classes; Earn a Degree, Graduate Early, dual credit, virtual learning, and/or college courses) that transition students to post-secondary education and/or careers;

☐ Establish rich leadership opportunities and co-curricular and extra-curricular offerings that allow students to become well rounded and develop their unique talents and abilities;

☐ Implement a quality curriculum that includes 21st century relevant career/technical programs that result in appropriate industry credentials or program completion;

☐ Implement required career planning curriculum that fully prepares students to establish goals, make appropriate course selections and prepare adequately for transition to post-secondary education and/or careers;

☐ Implement a school-wide agreed on scope and sequence for integrating 21st century content, learning skills, technology tools and assessments; and

☐ Use a school-wide monitoring system, including classroom walkthroughs and use of assessment data, to promote communication about student learning.

Instruction - "How We Teach"

To assure that classroom instruction reflects research-based instructional design, management, delivery and assessments, leaders in high performing 21st century schools:

☐ Create and support a culture of high expectations for all students, regardless of gender, race, native language, background, culture or disability;

☐ Promote and support staff understanding of human growth and development characteristics of adolescents and how to address these in instructional strategies and classroom management;

☐ Expect each classroom environment to be one where students feel a sense of belonging, personal respect, freedom within parameters to develop and express opinions and become self-directed and self-analytical learners;

☐ Expect teachers across all subjects to enhance student vocabulary, the ability to write and the ability to read with comprehension through the use of content appropriate strategies;

☐ Implement a consistent school-wide writing model that includes adequate practice in narrative, persuasive, informative and technical styles and is assessed using common rubrics and portfolios;

☐ Implement a 21st century balanced assessment system through teaching and learning to diagnose student needs, plan next steps in instruction and provide students with descriptive feedback they can use to improve the quality of their work;

☐ Implement and monitor pervasive use of performance-based assessments (e.g., projects, demonstrations, essays, debates, simulations, products) to evaluate student critical thinking skills, problem solving skills and the ability to use and apply information;

☐ Support the use of grading and descriptive feedback practices that keep students well informed of their progress and build on students' abilities to demonstrate mastery;

☐ Support the use of culminating or exit assessments (e.g., common final exams, end-of-course tests, senior projects, portfolios) that evaluate the student's ability to apply 21st century skills, tools and content and measure proficiency in the core curriculum and career area of focus;

☐ Develop and monitor the use of agreed upon consistent school rules and procedures that help students gain the skills and knowledge to be successful with future societal roles in communities and work places;

☐ Expect all educators to use a standards-based lesson planning format that begins with the end in mind, focuses on essential questions and core concepts, and aligns assessments, instruction and resources to the W V CSOs and 21st century learning;

☐ Implement and support the use of a common format for course syllabi that clarifies expectations to students and families and that includes rubrics to define rigorous levels of high quality in classrooms;

☐ Understand, guide and expect pervasive use of appropriate research-based instructional strategies;

☐ Expect daily instruction to be engaging, rigorous and relevant using strategies that lead to proficiency in W V CSOs and 21st century learning and that hold students accountable for high quality work;

☐ Expect teachers to differentiate instruction by adjusting process, product, assessments, grouping patterns and time to accommodate student learning profiles, readiness and interests using the philosophy of Universal Design;

☐ Expect educators across all subjects to develop 21st century technological literacy skills that result in graduates who can find, decode, critically evaluate and transfer information and find meaningful ways to share it with others;

☐ Implement and guide the use of a defined and effective process for timely instructional intervention when students fail to learn essential skills; and

☐ Use a school-wide formalized instructional monitoring system to assure that the instructional and curriculum priorities are being addressed and that schedules meet the needs of the students.

School Effectiveness - "Where We Teach"

To assure that all schools have the leadership, culture and organizational practices representative of effective schools, leaders of high performing of 21st century schools:

☐ Develop a school-wide mission that unites the staff, guides all actions and vividly defines what is to be accomplished for high school students;

☐ Create a cohesive culture with a sense of collective responsibility for student achievement where teachers work cooperatively with colleagues as continuous learners and problem solvers to benefit students;

☐ Establish a school-wide safe, orderly and positive learning environment this is characterized by a strong school spirit and a sense of pride;

☐ Create a culture of high standards for staff as well as students where staff members model professionalism in language, dress and demeanor and in the way they interact with students, colleagues and community;

☐ Use a collaborative strategic planning process involving all staff in school-wide and classroom improvements that will enhance student learning;

☐ Develop innovative and creative scheduling patterns that examine all options for meeting the academic needs of students including before school, afterschool, double dosing, and other ways of modifying time;

☐ Model leadership as a developer of people, who organizes a school-wide structure for professional growth (e.g., professional learning communities) and devises varied means of enhancing the knowledge and skills of the staff to produce results for students;

☐ Secure and blend resources to support 21st century student learning, including 21st century technology tools and content specific resources;

☐ Use an effective model for school-wide decision making, problem solving and conflict resolution that promotes efficiency and harmony;

☐ Establish as a priority attracting, developing and recognizing high quality teachers who have deep content knowledge and effective pedagogy; and

☐ Promote school-wide knowledge and development of the seven correlates of effective schools as a basis for school-wide improvement efforts.

To assure that all students receive the support they need to achieve high levels of performance and that all families and community members are treated as valued partners, leaders of high performing 21st century schools:

☐ Create a school wide sense of belongingness among all students whether they are artists, musicians, athletes, academic or technical scholars;

☐ Provide opportunities and processes that develop leadership skills in students;

☐ Promote a sense of collective responsibility and ownership for bringing all students to proficiency regardless of disabilities, previous achievement, native language, background, or culture;

☐ Conduct ongoing evaluation of activities, policies and procedures (e.g., fees, field trips, grouping practices) to assure access and equity;

☐ Establish and implement school wide practices, procedures and programs that develop students' respect for cultural, gender and socio-economic differences in order to prepare them for living in a 21st century global society;

☐ Develop formalized school structures and/or processes that provide ongoing support and guidance from a caring adult such as in an advisory or mentoring program;

☐ Implement a personalized guidance and scheduling process that focuses students on post-secondary and personal goal development and assures a rigorous four-year curriculum experience;

☐ Implement a comprehensive developmental guidance program evaluated by measurable results that is both proactive and responsive to today's adolescent needs;

☐ Establish a system for successfully transitioning ninth graders that considers their unique needs and lays the foundation for success in a rigorous high school program;

☐ Develop and support initiatives designed to intervene and/or support students with academic or personal difficulties (e.g., behavioral issues, pregnancy, drug addiction, academic deficits) which exemplify high expectations and personal regard for students;

☐ Create a school-wide environment that is welcoming and respectful of parents, solicits and values their input, finds multiple ways to invite and engage them in school initiatives;

☐ Establish and model a school-wide commitment to effective two-way communication with parents that is respectful of the diverse backgrounds and challenging needs of families;

☐ Establish and support initiatives to build parents' capacity to support students (e.g., special seminars on teen issues, five-year plan, college entrance information, graduation requirements, information on International Baccalauriate, Advanced Placement, Earn a Degree, Graduate Early, dual credit, rigorous senior year)

☐ Create formalized structures within the school to link students and families to community agencies and social services;

☐ Establish proactive partnerships and relationships within the community that are mutually beneficial, that result in the school being a respected and valued partner and that expand the school's ability to meet the needs of all students;

☐ Develop a process that encourages the community to share resources and talents of individuals and groups;

☐ Create and promote a school-wide environment that promotes healthy lifestyles and personal wellness; and enlist families and the community as partners in this effort; and

☐ Focus on personalizing the school environment and developing a sense of affiliation among students (e.g., learning communities, ninth grade academies, interdisciplinary teams and looping).

Descriptions
The Six Elements of 21ˢᵗ Century Learning

1. A FOCUS ON CORE SUBJECTS – Core academic subjects remain the foundation of a good education. No Child Left Behind identifies these as English, reading and language arts; mathematics; science; foreign languages; civics; government; economics; arts; history; and geography. Standards, objectives and performance descriptors for each core subject are defined in the West Virginia content standards and objectives. No Child Left Behind also requires that students be technology literate by the end of the eighth grade. The focus on core subjects must expand beyond minimal mastery to high levels of understanding and skill. Knowledge, learning skills and use of technology tools must be built on a firm foundation of core subjects.

2. EMPHASIS ON 21ˢᵗ CENTURY CONTENT – Education and business leaders identify four significant, emerging content areas that are critical to success in communities and work places of the 21ˢᵗ century. Schools need to give greater prominence in the curriculum to these four areas. This emphasis may come from adding additional courses to the curriculum or by emphasizing this content in existing courses. Teachers can add a rich understanding of this content by infusing this content in contextual learning experiences. The areas are:

   - GLOBAL AWARENESS – Technology is obliterating geographic boundaries and time zones; collaboration and communication across these boundaries is now commonplace. Students need a deeper understanding of the thinking, motivations and actions of different cultures, countries and regions. Global awareness promotes understanding, tolerance and acceptance of ethnic, cultural, religious and personal differences. It also helps students work through the complexities of different points of view that spring from different parts of the world.

   - FINANCIAL, ECONOMIC AND BUSINESS LITERACY – Students are and will increasingly be responsible for making sophisticated economic and business choices that will profoundly affect their future. These everyday choices can result in personal prosperity or poor financial decisions. Similarly, most people enter work places after high school without even a rudimentary understanding of various business processes, entrepreneurial spirit or economic forces that shape our lives. Financial, economic and business literacy will help students better manage their personal finances and contribute more productively in work places.

   - CIVIC LITERACY – The United States needs informed, responsible citizens to participate in the political process. Civic literacy can help students understand, analyze and participate in government and in the community, both globally and locally.

   - HEALTH AND WELLNESS AWARENESS – Being a successful citizen and worker in the 21ˢᵗ century requires knowledge and habits that contribute to personal health. With increasing costs in medical care and health insurance and the personal impact on happiness and well-being, students must understand the importance of healthy lifestyles.

3. 21st CENTURY CONTEXT – Good teachers have always helped students discover the value and relevance of new skills and knowledge. Children now live in a world of almost unlimited streams of trivial and profound information, of enormous opportunity and difficult choices. Helping students make vital practical, emotional and social connections to skill and content is more important that ever. To help students make these meaningful connections, teachers can create a 21st century context for learning by

   - Making content relevant to students' lives;
   - Bringing the world into the classroom;
   - Taking students out into the world; and
   - Creating opportunities for students to interact with each other, with teachers and other knowledgeable adults in authentic learning experiences.

   In these ways, students can see the connections between their schoolwork and their lives outside the classroom, now and in the future. These connections are critical to developing students' engagement, motivation and attitudes about learning.

   By teaching in a 21st century context, educators can create a balanced education that reflects both national concerns and local needs.

4. USING 21st CENTURY TECHNOLOGY TOOLS TO GAIN INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) LITERACY – Information and communication technology (ICT) literacy is the ability to use technology to develop 21st century context knowledge and learning skills, in support of 21st century teaching and learning. In a digital world, students need to learn to use the tools that are essential to everyday life and work place productivity. The West Virginia content standards and objectives have been revised to integrate 21st century learning skills with 21st century technology tools, using national technology standards. In West Virginia, these are entitled, "Standards for 21st Century Learning." Important 21st century technology tools include:

   - Information and communication technologies, such as computers, networking and other technologies (electronic probes, Ipods, electronic white boards, etc.);
   - Audio, video, multimedia and other digital tools;
   - Access to online learning communities and resources; and
   - Aligned digital content, software and adequate hardware for all students and educators with appropriate technology support systems.

   The mix of technology tools will change and evolve rapidly in the future. Today's technology may be obsolete tomorrow. It is impossible to predict the tools that will be essential for learning and working in the years to come. This is why it is important for people to acquire the learning skills that will enable them to learn to use next-generation technology and why business people and educators need to continue collaborating so schools will stay abreast of new technology.

5. **21ˢᵗ CENTURY ASSESSMENTS** – A 21ˢᵗ century balanced assessment system includes a combination of summative assessments, benchmark assessments and formative classroom assessments. Professionals at all levels must evaluate and implement assessments based on their intended purpose and appropriate use. All assessments provide evidence of student learning that must be clearly communicated to the intended users in order to assure student success. Assessments in the 21ˢᵗ century must measure higher-order thinking and reasoning through the use of authentic performance-based measures. Twenty-first century assessments will increasingly utilize technology as a means of test administration, reporting, record keeping and monitoring student progress.

Summative Assessments of Learning
Summative assessments must be appropriately balanced with benchmark assessments and formative classroom assessments to adequately evaluate the full range of student proficiency. Summative assessments in the 21ˢᵗ century are guided by the following characteristics:
- Summative assessments measure core subjects aligned to the West Virginia content standards and objectives that include 21ˢᵗ century content, learning skills and tools.
- Summative assessments document individual and group achievement status at a point in time.
- Summative assessments are used for accountability and to inform students, educators, parents and the community of student, school and system performance.

Benchmark Assessments of/for Learning
Benchmark assessments may be formative or summative in nature. They use multiple measures and a variety of instructional and assessment rubrics to guide the assessment process. They are used for instructional feedback, not for accountability purposes. Benchmark assessments in the 21ˢᵗ century are guided by the following characteristics:
- Benchmark assessments are typically administered by the district or school at predetermined points during the instructional process to measure student mastery of specific instructional objectives.
- Benchmark assessments provide feedback to students, teachers, parents, schools and the school system on students' relative progress toward instructional targets.
- Benchmark assessments provide timely information that allows in course correction before students fall hopelessly behind.

Formative Classroom Assessments for Learning
As an integral part of the instructional cycle, formative classroom assessments provide students, teachers and parents with a continuing stream of evidence of student progress in mastering the knowledge and skills that build toward standards. Formative classroom assessments in the 21ˢᵗ century are guided by the following characteristics:
- Formative classroom assessments are conducted throughout teaching and learning to diagnose student needs, plan next steps in instruction and provide students with feedback they can use to improve the quality of their work.
- Classroom assessments are learner-centered, rooted in effective teaching strategies, context-specific and support ongoing student growth.
- Formative assessment information is clearly communicated and provides feedback to students and their parents for monitoring student progress toward achieving learning goals.
- Formative assessments are increasingly authentic in nature and include multiple performance-based measures.

6. 21st CENTURY LEARNING SKILLS

INFORMATION AND COMMUNICATION SKILLS	**INFORMATION AND MEDIA LITERACY** The understanding of how words, images and sounds influence the way meanings are created, shared and analyzed in a contemporary society so that a person can assign value, worth and meaning to information through a variety of media forms. **VISUAL LITERACY** The ability to interpret, use, appreciate, and create images and video using both conventional and 21st century media in ways that advance thinking, decision-making, communication and learning. **COMMUNICATION SKILLS** The skills needed to generate and convey messages with meaning and understanding within and across various contexts, cultures and media.
THINKING AND REASONING SKILLS	**CRITICAL THINKING** The clear, precise and purposeful process of using specific cognitive skills and strategies to guide belief and action in accomplishing goals. **SYSTEMS THINKING** The ability to see and understand the whole, to recognize patterns and interrelationships of parts, and to determine how to structure those interrelationships in more effective, efficient ways. **PROBLEM SOLVING** The ability to apply appropriate processes, including problem identification, information gathering, problem analysis, generating and testing alternate solutions, and evaluating results in order to generate resolutions to problems. **CREATING AND INNOVATING** The act of bringing an idea, product or performance into existence that is genuinely new, original and of value either personally and/or culturally.
PERSONAL AND WORK PLACE PRODUCTIVITY SKILLS	**INTERPERSONAL AND COLLABORATION SKILLS** The ability to read and to manage the emotions, motivations and behaviors of oneself and others during social interactions or in a social-interactive context. Collaboration means cooperative interaction between two or more individuals working together to solve problems, create novel products, or learn and master content. **SELF-DIRECTION** The ability to set goals, plan for achievement, initiate action, manage time and effort, and independently monitor and assess one's own effort. **ADAPTABILITY** The ability to modify one's thinking, attitudes or behaviors to be better suited to current or future environments, as well as the ability to handle multiple goals, tasks and inputs with understanding and adhering to constraints of time, resources and systems. **ETHICAL BEHAVIOR** The ability to act with integrity according to the principles of right and/or moral conduct. **SOCIAL/PERSONAL ACCOUNTABILITY** The acceptance of responsibility for personal actions, including responsibility for learning, and to initiate or support actions that resolve issues in the interest of the common good. **LEADERSHIP** The process of influence or example by which an individual induces a group to pursue objectives held by the leader or shared by the leader and his or her followers. **PROJECT PLANNING AND DEVELOPMENT** The ability to organize and achieve the goals of a specific initiative or problem with efficiency and effectiveness.

Component 3
Systemic Continuous Improvement Process

High performing schools share not only common strategies for change, but also share common methods for bringing about that change. They have a basic commitment to everyone getting better all the time in order to improve results for students. They have a defined collaborative improvement process that is embedded into the life of the school. They set aside time to study a variety of student data, to identify needs, to study possible strategies and to set forth an action plan based on a cycle of "plan, do, study, act." Described below are common elements embedded in the high performing school's improvement process:

1. Transformational leadership that creates a learning-centered system;
   Staff is dedicated to making the school a place that focuses itself around high levels of student learning for all. All the adults in the building consider themselves learners dedicated to developing knowledge and skills that enhance the learning of their students and the overall improvement of the school.

2. An expectation that change will be an ongoing, continuous process;

   Staff members view change and improvement as a natural part of their professional life. They are dedicated to the concept of getting better all the time and actively participate in the initiatives that improve the school.

3. Identification of core beliefs that drive improvement efforts;

   Staff has a mutually developed set of core beliefs that guide personal and organizational action. The beliefs are held in esteem by the staff and are considered inviolate.

4. A well-articulated mission that includes a focus on "21st Century Learning for All";

   Staff is committed to the mission of the school and takes personal action to further that mission in classroom and school-wide initiatives.

5. A broad understanding of and commitment to change based on internal and external factors;

   Staff is open to change and investigates educational research and best practices to inform classroom and school innovations.

6. A focus on systemic approaches to design and implementation;

   When innovations are planned and implemented over time, staff considers how the innovation will impact various aspects of the school, adjusts as appropriate and considers how the innovation will be supported and monitored over time.

7. Pervasive use of data both to target and to refine improvement efforts;

   Staff is knowledgeable of specific classroom and school-wide data on student outcomes as well as international, national and state data that guide educational reform.

8. Change initiatives and processes that address the interrelatedness of activities and resources;

   Staff thinks long-term and systemically about changes, resisting fads and quick fixes.

9. An implementation process that reflects the cycle of plan, do, study, act;

   Staff is committed to long-term planning that implements innovations in appropriate stages and that studies and improves those innovations until they are institutionalized in a quality way.

10. A collaboratively developed strategic plan focused on results;

    Staff owns the direction and strategies described in the school strategic plan; they collaborate annually to update and revise the direction based on student needs.

Reflections: Nurturing A Collaborative Spirit

In West Virginia, we have a history of facing challenges with great commitment and determination. Born from conflict, our state has been the site of great battles and great tragedies. Rugged terrain, economic instability and rural isolation have all played a role in our collective experience. Certainly, most would find these daunting. But to West Virginians, they define and shape our character. We are people who understand uphill battles, who make the most of scarce resources, and who have learned to care for and depend on each other. It is with this spirit and character that we will face the challenges of a new era in education.

The fundamental mission of public schools has changed from "Learning for Some" to "Learning for All." The new federal accountability standards require that all students master the essential curriculum regardless of race, ethnicity, poverty, disability or language deficits. This legislation establishes a clear mandate; every student not only has the right to go to school, but also has the right to exit with the knowledge and skills necessary for productive citizenry. Recent national consciousness on the dramatic changes in global economic competitiveness mandate us to strive for higher levels of student performance that address the personal and work place demands of the digital 21st century.

Whether one agrees with the specifics of the accountability standards or not, two facts remain clear: (1) accountability for both quality and equity in student achievement will certainly continue and (2) there are increasing numbers of schools and school systems that have been able to bring all students to mastery or beyond. If you can build one, you can build more than one. Thus, it seems prudent to learn from these schools and school systems and to apply their experiences, as appropriate, to our own.

As we begin this collective journey to build a school system that prepares students for the 21st century, perhaps our greatest resource will be each other. Though we can learn from those outside our borders, we also must commit to greater collaboration and less competition within our borders. We have a common focus, a common school improvement language and common frameworks; surely then, our collective wisdom and experience can chart the way for collective success. We are not strangers to great challenges. West Virginians are people of great hope, great determination and great heart. Together, we can continue to build a great school system that assures the best for the students we serve.

Building a Common Language for School Improvement

An integral part of any change process is effective communication. Many terms used in the Framework for High Performing School Systems may be new to staff; others may have unique working definitions written by the consensus committee to align with West Virginia Board of Education policies or recommendations. The following list represents terms frequently used in the framework document and other supporting resources.

1. Benchmarks – Predetermined points during the instructional term when student mastery of specific instructional objectives is assessed.

2. Classroom Walkthrough – A non-evaluative but focused classroom observation made for a brief period of time (3-5 minutes) to observe specific classroom practices; the walkthrough observation is used to enhance reflective practice and to gather school-wide information regarding professional development and school improvement.

3. Continuous Improvement – A set of activities designed to bring gradual but continual improvement to a process through constant review and refinement.

4. Correlates of Effective Schools – The seven characteristics identified from research that enables schools to bring all students to mastery regardless of background factors like poverty, race, gender or ethnicity: Clear and Focused Mission, Safe Orderly Environment, High Expectations for All, Time On Task/Opportunity to Learn, Strong Instructional Leadership, Frequent Monitoring of Student Progress and Positive Home/School Partnerships.

5. Curriculum Alignment – The ongoing process of bringing congruence to the written curriculum, taught curriculum and assessed curriculum so 1) all that is assessed has been taught and (2) what is taught encompasses the written curriculum.

6. Curriculum Management System – A series of ongoing interrelated activities designed to implement, support, monitor and evaluate the system curriculum to assure that all students have access to and benefit from an aligned, high quality prioritized and sequenced curriculum.

7. Curriculum Map – A graphic representation of the recommended instructional sequence for curriculum objectives during the instructional year and across grades Pre K-12, used as a management tool for enhancing curriculum continuity, communication and coordination.

8. Curriculum Prioritization – The local consensus process of assigning relative value to curriculum objectives in order to make informed instructional decisions about the amount of time allocated to an objective and the degree to which it is an instructional focus. (Note: It is recommended that no objective be completely eliminated during the prioritization process).

9. Differentiated Instruction – A systematic approach to planning curriculum and instruction for academically diverse learners; a blend of whole class, group and individual instruction, guided by the three principles of differentiation: respectful tasks, flexible grouping and continual assessment.

10. **Effective Schools Research** – The body of research conducted in the early '70s and '80s as a response to the Coleman Report, which concluded that schools with certain characteristics or correlates of achievement can bring all students to mastery levels regardless of student background characteristics.

11. **Enduring Understanding** – The big ideas and important concepts that are the heart of the content area and have lasting value and application in the student's life.

12. **Essential Questions** – An expression of inquiry that motivates students to seek broader understanding and deeper meaning of the content objectives.

13. **Formative Assessment** – Periodic evaluation of the student's achievement level of the West Virginia content standards and objectives used to adjust instructional time and strategies so all students will achieve proficiency and beyond.

14. **High Yield Instructional Strategies** – Categories of instructional activities that have been verified through research to correlate with high student achievement.

15. **Instructional Management Practices** – Commonly agreed upon practices within a school for conducting routine tasks in the classroom and organizing the instructional process.

16. **Instructional Management System** – A series of ongoing, interrelated activities designed to implement, support, monitor and evaluate the system's instructional process to assure that all are engaged in and benefiting from the instructional program.

17. **Learning Community** – A group of educators within a school or school system which works to create a climate that focuses on reflective practice, collegiality and ongoing professional development targeted toward improvement of student learning.

18. **Monitoring System** – An ongoing system to collect data on a program; designed to provide feedback on whether the program is fulfilling its functions, addressing the targeted population and/or producing those services intended; monitoring is different from evaluation; its purpose is to help refine and make in-course corrections.

19. **Objective** – Grade and subject specific descriptions of the knowledge and skills needed to achieve proficiency of the content standards.

20. **Organizational Culture** – The overall pattern of beliefs and values of an organization that (a) manifests itself in policies, procedures and organizational structures and (b) ultimately shapes the behavior of personnel.

21. **Pacing Guide** – A graphic representation or timeline illustrating the sequence and amount of time allocated to instructional objectives during the school term.

22. **Performance Assessment** – An evaluative method usually judged with a predetermined rubric that requires students to demonstrate a level of proficiency of the West Virginia content standards and objectives by applying knowledge to authentic tasks such as projects, presentations, activities, exercises or problemsolving.

23. **Performance Descriptors** – Narrative explanations of five levels of student achievement (distinguished, above mastery, mastery, partial mastery and novice) used by the teacher to assess student attainment of the West Virginia content standards and objectives.

24. Prioritization Criteria – The basis for assigning relative value to curriculum objectives based on (a) the overall importance for a student's enduring understanding of the content, (b) the importance of the objective as a prerequisite to the next level of learning, (c) the results of prior assessments of student proficiency and (d) the value of the objective on high stakes testing.

25. Programmatic Level – The organization of educational programs and services for delivery to students according to the students' common developmental characteristics: early childhood (Pre-K to grade 4), middle childhood (grade 5 to grade 8) and adolescent education (grade 9 to grade 12).

26. Proficiency – The level of student achievement for students who achieve at the mastery, above mastery, or distinguished levels.

27. Reading Comprehension – The degree to which students derive not only the facts from a written passage but the degree to which they gain an understanding of its meaning; when all teachers within a school use techniques to develop comprehension (pre-reading vocabulary development, guiding questions, graphic organizers, jig saw activities, etc.), overall achievement improves.

28. Reflective Practice – An improvement practice designed to promote the teachers' self analysis of instructional practice by thoughtfully considering their own classroom practices and comparing the results to those of successful practitioners; reflective practice is often accompanied by coaching from skilled practitioners who guide the reflective process.

29. Rubric – A predetermined, detailed scoring guide used by teachers to communicate and evaluate levels of student performance of a complex task.

30. School System Transformation – The rethinking, reorganization and refocusing of school system organizational structures and expectations to achieve the new mission of "Learning for All."

31. Standards-based Curriculum – A curriculum framework that establishes clear, comprehensive exit learning expectations for all students, further defines the expectations through specific grade level and subject objectives, and provides performance descriptors for evaluating student level of achievement relative to the West Virginia content standards and objectives.

32. Standards-based Unit – Extended instructional sequence involving several lessons of related objectives organized around a broad theme, enduring understanding or essential question that often culminates in a performance assessment.

33. Strategic Plan – A document used by an entity to align its overall organization and budget with its priorities, missions and objectives; a strategic plan should include core beliefs, a mission statement, a description of the agency's long-term goals and the evidence it will accept as having achieved those goals, objectives, strategies or means the organization plans to use to achieve these goals and objectives, and a description of the specific actions that will be taken; the strategic plan also may identify external factors that could affect achievement of long-term goals.

34. Student Achievement Variables – The major variables controlled and/or influenced by the school system that impact student achievement; these variables are quality of curriculum, quality of instruction, quality of school organization and environment, and the family background and characteristics of the student.

35. Support System – A network of people who interact and remain in communication for mutual assistance; also, resources, activities and information that enable staff to accomplish assigned responsibilities.

36. System – A series of interrelated components designed to achieve a common goal; as applied to a school system, a series of integrated activities, procedures, policies and professional development designed to achieve a common purpose.

37. Systemic Change – Change that occurs in all aspects and levels of a system; systemic change requires redesign of fundamental approaches within an organization while considering the effect on all other aspects of the organization.

38. System-wide School Improvement Cycle – A series of steps and/or processes expected within each school to develop and implement the school's strategic plan.

39. Transformational Leadership –The ability to affect the thoughts, feelings and behaviors of a significant number of individuals through intentional actions and the creation of a body of work.

40. Understanding by Design (UbD) – A three-stage instructional planning framework that helps teachers develop quality standards-based lessons that result in student proficiency and enduring understanding.

41. Universal Design – An approach to designing course instruction, material and content to benefit people of all learning styles without adaptation of retrofitting. This approach provides equal access to learning, not simply equal access to information. Universal Design allows the student to control the method of accessing information while the teacher monitors the learning process and initiates any beneficial methods.

42. Values and Beliefs – The standards or qualities considered worthwhile and desirable by an organization; the statements, principles or doctrine that the system accepts as true and uses to guide decisions and shape behavior.

43. Writing to Inform – Nonfiction writing assignments used to argue, criticize, define, describe, discuss, evaluate, explain, compare and contrast or summarize topics in the classroom; consistent use of writing to inform assignments in all content areas and consistent judging by a commonly used rubric correlates with high student achievement.

44. West Virginia Written Curriculum – The written scope and sequence of what students should know and be able to do as the result of the instructional process as defined by the West Virginia content standards and objectives (also referred to as the essential curriculum).