Emerging consensus regarding the goal of preparing all students to graduate from high school ready for college, career and citizenship confirms that policymakers and practitioners must be successful in transforming education systems and making continuous improvement processes a focal point of every system. This paper provides education leaders and policymakers with an overview of the changes that need to be made so that data and information are used more effectively to ensure systems coherence and the success of each individual learner.\(^1\)

Effective models of continuous improvement are built around four primary elements:

1. Setting Standards for Performance
2. Collecting, Mining and Analyzing Data to Develop a Profile and Goals
3. Developing a Deep Understanding of Performance Successes and Challenges
4. Making Meaningful Change

The paper concludes with a description of AdvancED’s Adaptive System of School Improvement Support Tools (ASSIST™). More than 30,000 schools and systems in the AdvancED accreditation and school improvement network use ASSIST as part of their continuous improvement processes.

\(^1\) This document expands upon the discussion of diagnostic review set forth in AdvancED’s recommendations on ESEA reauthorization: ESEA Reauthorization Recommendations: Beyond the Numbers (April 14, 2011).
Organizational leaders from nearly every sector have been using continuous improvement models for year to improve products, services and processes. Although there are differences in approaches, reflection is generally the core principle – greater efficiency and better outcomes can result from regular examination of performance, identification of problematic processes and development of a plan to eliminate those problems. The result is often incremental improvement over time, but it can also lead to much more dramatic change.

Though continuous improvement processes are not new in the education practice, they have only begun to gain significant attention in the policy arena. In the past, strategies for improving educational outcomes at the school and system levels were driven by federal and state requirements and centered largely on the development of one or more annual “improvement plans” that were used to chart a course of action (and investment). Statewide systems of school improvement and support were focused largely on compliance and sanctions. They lacked the ability to bring information resources to provide for more effective, strategic supports. Today’s focus on embedded, systemic continuous improvement requires a different approach – an approach that is comprehensive, coherent, multi-faceted and ongoing.

Existing systems of accreditation and accountability (including well-established school and district accountability systems and newer systems aimed at improving the effectiveness of teachers and leaders) have begun to be refined and enhanced to support such efforts. Continuous improvement was included as a requirement in the Race to the Top – District competition. Diagnostic review is now recognized as a core principle of next-generation accountability
systems and is being integrated into the new systems of differentiated accountability and support being implemented by a number of states under the federal ESEA Flexibility initiative. Both the Council of Chief State School Officers (CCSSO) and the Forum on Educational Accountability have endorsed diagnostic review as a key strategy for next-generation accountability systems. Forty-four states and the District of Columbia have committed to the CCSSO Principles as an underpinning for their development of next-generation accountability systems. Still, much work remains to be done. In particular, continuous improvement processes need to be designed with much more deliberate focus on the achievement of learners and aligned with the overarching goals of the system.

The capacity built in longitudinal student data systems and data use has provided critical foundations for this work. There is a new and important focus on the diagnosis of performance problems through rigorous reviews (both internal and third-party external reviews) of data and information and the determination of the root cause of underperformance that can then be addressed through a range of targeted strategies and actions.

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5 Additionally, the CCSSO Principles, including the requirement for diagnostic review, are included in the comprehensive reauthorization bill for ESEA passed by the Senate Committee on Health, Education, Labor and Pensions on October 20, 2011.
Achieving Coherence

Through these efforts and the work of others, a new model for effective continuous improvement in education systems is emerging and includes the following four elements:

1. **Setting Standards for Performance**
2. **Collecting, Mining and Analyzing Data to Develop a Profile and Goals**
3. **Developing a Deep Understanding of Performance Successes and Challenges**
4. **Making Meaningful Change**

1. **Setting Standards for Performance**
   The improvement of education systems must begin with a set of standards derived from an understanding of the attributes of effective schools and districts and knowledge of the particular context and conditions in which the system operates. Effective schools have among their attributes strong instructional leadership, a standards-based curriculum, data-driven instruction, universal access of students to highly effective educators, safe and supportive learning environments and more. There is emerging evidence that effective schools focus both on traditional, academic factors as well as non-cognitive factors. The standards that a state or system adopts should provide the foundation and framework for continuous improvement efforts. The AdvancED Standards for Quality School Systems, described on page 3, provide an example of what standards should entail.

2. **Collecting, Mining and Analyzing Data to Develop a Profile and Goals**
   Guided by a set of strong standards, systems can collect, mine and analyze data to build a profile of all aspects of the district and its schools. Data should be gathered from a variety of relevant sources including demographic data, results of assessments for learning such as short-cycle and formative assessments, information from observations of classroom practice and student engagement, results of summative assessments, perception data from surveys of students, parents, teachers and more. From this foundation, a set of goals can be established and performance indicators identified.

   Systems then must create the expectation that the analysis of key data and the reflection on the changes needed to improve student outcomes will become institutionalized in professional practice.

3. **Developing a Deep Understanding of Performance Successes and Challenges**
   Diagnostic review involves a comprehensive analysis of multiple, relevant sources of data and information (as outlined above) as a basis for determining the root causes of school and district performance. For too long, diagnostic review has been a missing link in the bridge between reflection and improvement planning.

   Even as analysis, reflection and refinement become part of regular practice, with the support of system and institutional leaders, it is important to provide for comprehensive, diagnostic review of all aspects of the system. This should include internal diagnostic reviews carried out by district and school personnel and external diagnostic reviews carried out by third-party experts and a distinguished practitioner.
The internal diagnostic review involves a guided self-assessment, comprehensive, internal reflection on progress toward goals and diagnosis of challenges. Internal review helps keep a school’s key stakeholders engaged in the process and provide information for regular refinement of teaching practice and instructional focus.

The external diagnostic review allows for an independent assessment of school and district quality and recommendations for improvement. It should be based on a more expansive body of data and information including classroom observations and interviews with central office staff, school board members, parents, students and community and business leaders. The importance of the external review should not be underestimated. It is through these critical third-party, expert assessments that common assumptions can be challenged and new light shed on issues that may have been overlooked.

4. Making Meaningful Change

Armed with information and a good understanding of the causes of underperformance, district and school leaders can create and regularly refine as necessary a research-based plan for continuous improvement with actions that have been demonstrated to lead to desired results. Throughout the year, district and school leaders must regularly monitor implementation of their improvement strategies, discuss and analyze what is or is not working, and make any necessary adjustments to the improvement plan. Continuous improvement requires an iterative approach, not a set of rote tasks.

AdvancED’s Effective Learning Environments Observation Tool (ELEOT)

ELEOT is a school improvement resource that supports the identification of observable evidence of classroom environments that are conducive to learning. Its design represents a shift from a focus on whether teachers demonstrate certain instructional practices to a focus on whether learners are engaging, acting, reacting and benefitting from their learning environments.

ELEOT includes seven learner-focused items, each of which is aligned to one of AdvancED’s Standards for Quality Schools. These items direct observers to identify and document whether learning environments are:

- Equitable
- Based on high expectations
- Supportive
- Grounded in active learning
- Focused on progress monitoring feedback
- Well-managed
- Digital

Results from ELEOT-based ratings are used by external reviewers to form a comprehensive perspective of a school or system by corroborating information obtained from interviews, artifacts or other evidence, student performance data and stakeholder feedback data. Results are not focused on the ratings or evaluations of individual educators.
AdvancED’s Adaptive System of School Improvement Support Tools (ASSIST™)

As continuous improvement processes are enhanced and institutionalized to include robust diagnostic reviews, a growing number of states, schools and systems have access to tools and training that facilitate data collection, data analysis, reflection and improvement. One such tool is AdvancED’s state-of-the-art school improvement management tool – the Adaptive System of School Improvement Support Tools (ASSIST™). ASSIST is designed to broaden and sharpen thinking about school and system improvement, performance and accreditation. The many disparate requirements, duties and functions of effective leadership and compliance are brought together into a single, seamless tool. Redundancies in reporting and monitoring requirements are eliminated. Progressive thinking and dialogue about school quality are encouraged and facilitated.

The system is packaged as a user-friendly online resource that collects and integrates a broad array of data to extend the world’s leading knowledge base on K-12 organizational management and performance. Using ASSIST, states, schools and systems can gain a better understanding of their past successes and present opportunities so that they can confidently build a solid, research-based improvement initiative for the future.

ASSIST uses global standards for organizational effectiveness as the foundation for a single, integrated, dynamic “information architecture” to determine how improvement efforts are working at the local, state and national levels. It provides enhanced utility, increased operational efficiency, performance analytics, research based surveys for gathering stakeholder and student perception data, tools for observing learners in the classroom, and improved reporting and research capacity for analysts and policymakers alike.

ASSIST provides a system for fostering focused peer-to-peer conversations. School leaders and improvement teams can quickly and easily find peers who are facing similar circumstances. ASSIST allows them to learn, share and help one another improve. As a true innovation in school improvement practices and capabilities, ASSIST will help support a groundbreaking international dialogue about educational and institutional quality.

AdvancED has developed and supports the use of ASSIST in all 30,000 schools and systems that make up the AdvancED accreditation and school improvement network in the United States and abroad. A growing number of state education agencies are making ASSIST a core part of their statewide systems of school and district improvement including the state departments of education in Kentucky, Michigan, Wyoming and Alabama.

Over the next five years, AdvancED will create educator- and student-facing components for ASSIST. ASSIST for Educators will facilitate the analysis and use of formative and summative data, enhance professional development plans and professional evaluations, establish professional networks and more. ASSIST for Students will serve as a portal for student goal setting, student credentialing, portfolio development and more.
Benefits for School and Systems

By using ASSIST, school and system leaders have access to a variety of tools and resources that will help them strengthen their work on each of the four continuous improvement elements:

1. Setting Standards for Systems Performance
   - ASSIST is designed around the AdvancED Standards for Schools and Systems and can be augmented with additional state and local standards and indicators.
   - ASSIST guides users, standard by standard, through the reflection of district and school data and the creation of a comprehensive profile of system quality, performance and progress.

2. Collecting, Mining and Analyzing Data to Develop a Systems Profile and Goals
   - ASSIST gives state, district and school leaders the information and tools they need to identify and address the discrete needs of different groups of students and provides an easy, efficient way to monitor and adjust improvement strategies and interventions as well as to share successful strategies across schools and districts.
   - ASSIST supports the collaborative use of data to inform instruction and improvement.
   - ASSIST facilitates the assimilation of data from multiple sources into one storehouse that can be accessed with a single log-in.
   - ASSIST presents data in customizable formats, including graphs, to promote informed dialogue and analysis.
   - ASSIST facilitates the collection and use of data and information on school environment, safety, discipline and other non-academic factors that can impact student achievement through the integration of teacher, student and parent surveys and the Effective Learning Environments Observation Tool (ELEOT) for conducting observations of classroom environments. ELEOT is described in detail on page 5.

3. Developing a Deep Understanding of Performance Successes and Challenges
   - ASSIST allows users to identify performance metrics to determine and monitor the performance levels of students, schools and systems.
   - ASSIST supports a robust diagnostic review process by providing reviewers, both internal and external, with standards, frameworks and systems (adaptable to state-specific contexts and needs) for conducting a multi-faceted analysis of the strengths and challenges of the system and access to research-based guidance on strategies for improvement.
   - ASSIST facilitates root cause analysis, through which users can identify and analyze the key factors that are causing areas of concern in order to formulate action plans to resolve those issues and improve system performance.

4. Making Meaningful Change
   - ASSIST guides users step-by-step in the development of a comprehensive, coherent improvement plan, and then facilitates the implementation and ongoing evaluation of improvement strategies.
   - ASSIST can be used (and is used) by districts for meeting a wide array of federal and state compliance requirements.

Benefits for State Education Agencies

By using ASSIST, state education agency leaders can provide their systems and schools with the tools and resources they need to strengthen their work on each of the four continuous improvement elements outlined above. They also can reduce administrative burdens on systems and schools by streamlining reporting, monitoring and compliance requirements. ASSIST also allows state education agencies to look at data, improvement strategies and resource allocations across systems to make more statewide systems of improvement and support more strategic and efficient.
About AdvancED®

AdvancED is the world’s largest education community, serving more than 32,000 public and private schools and districts across the United States and in 71 countries that educate more than 20 million students. We believe that students must be prepared to succeed in a constantly-evolving and diverse world and that educational institutions have a deep responsibility to deliver quality education to students from all walks of life.