Education Quality and Continuous Improvement Framework:
Resources and Support for Continuous Improvement Planning

Contents

Section 1: Research and Rationale

BACKGROUND FOR FRAMEWORK

This framework serves as one source of support in helping educators and administrators apply high-leverage practices to strengthen systems, and improve student achievement and well-being.

Our Vermont Education Quality Standards (EQS), Vermont State Board Rule 2000, were established to ensure that "*all Vermont children will be afforded* ***educational opportunities that are substantially equal in quality****…"* (V.S.A. Title 16, § 165). Essential to their implementation is a deep understanding of these standards. To facilitate this understanding and support school systems in their efforts to implement effectively, we offer the *EQS Research and Resources* companion in Section 3. In Vermont, continuous improvement planning is expected for all schools (p. 19). The purpose of the continuous improvement process is to use **rapid cycles of learning** to monitor and **document the impact** of prioritized, strategic improvement actions, in response to **data analysis** and needs assessments; the process and plan is designed to strengthen systems and improve learning for all students. A *Continuous Improvement Plan* template is included in Section 4. Improvement decisions should be directly related to the **instructional core** (City, Elmore, Fiarman, & Tietal, 2011), and to the five major components of our Education Quality Standards, as depicted in *figure 1.*

Academic Proficiency	opportunities to develop their skills and knowledge to be career and college ready.
Personalized Learning	opportunities to shape their own learning and to provide authentic engagement.
Safe, School Climate	environments where students feel healthy, safe and supported in achieving their goals.
High Quality Staffing	educators who are well trained and qualified to meet their needs.
Financial Efficiencies	quality experiences at a price which the community believes is appropriate.

Figure 1: The five major components of the Education Quality Standards

Theory of Action for Our Statewide System of Support

If we provide evidence-based, differentiated support, resources, and professional learning opportunities to SU/SDs, based on a coherent education quality framework for continuous improvement, ***then*** we will build statewide efficacy, equity, and internal accountability, and improve educational outcomes for all.

APPROACH TO CONTINUOUS IMPROVEMENT

Building capacity for improvement relies on strong relationships between improvement at the school, district, and regional level (Hatch, 2013). Embedded in our theory of action is the intent to build capacity for continuous improvement at the district level, rather than focusing innovation and improvement exclusively on a select group of schools. To that end, we will adopt an **improvement science approach** to continuous improvement when supporting Vermont schools. We further intend to place an emphasis on coordinating networked communities in which practitioners, researchers, and other experts may partner to build capacity and develop practice-based evidence (Bryk, 2015). This approach is aimed at preventing the trend in which highly rated schools become complacent, while low performers may be discouraged from getting the nuanced data they need to improve.

Improvement science is an approach for improving quality and productivity in diverse settings (Cohen-Vogel, Wagner, Allen, Harrison, Kainz, Socol, & Wang, 2015). In education, this approach involves studying problems of practice and their underlying systems and processes (Herrera, 2016). To achieve education quality and sustain continuous improvement we must determine what works among diverse educators teaching varied populations of students in varying organizational contexts (Bryk, 2014). Correspondingly, in our framework for continuous improvement, schools determine problems of practice, apply appropriate changes needed, and examine the effects of the change as improvement. Systemically, they apply a **Plan-Do-Study-Act cycle** to implement, test, and refine changes for continuous improvement (e.g. Deming, 1993; Langley, Nolan, Nolan,

Norman, & Provost, 2009). In contrast to an external accountability motive, our continuous improvement approach involves connecting systemic process, practices and outcomes; focusing on problems of practice; contextualizing solutions; and focusing on internal accountability among all members of the organization as a primary driver of improvement (O'Day & Smith, 2016). Further, the theories of improvement inherent in this framework are consistent with principles of adult learning theory (Knowles, 1984) and our VT Standards for Professional Learning, 2012, p.48).

APPLYING THE FRAMEWORK

This framework represents a synthesis of research related to high-leverage processes and practices from Fullan, Hill and Crevola (2006); Darling-Hammond and Plank (2015); and Fullan and Quinn (2016). Taken together, their findings and recommendations help guide our statewide system of support for education quality and continuous improvement, serving to:

- help supervisory unions and districts identify areas of strength and areas needing improvement;
- promote inquiry and internal accountability focused on personalized, proficiency-based learning and high levels of achievement;
- support educators in making effective improvement planning decisions; and
- build coherence in and across supervisory unions and district.

VISION/PURPOSE

We support all schools in fully implementing the Vermont Education Quality Standards so that all Vermonters have the skills, knowledge and dispositions they need to thrive in economic and civic life.

FUNCTIONS OF OUR VISION

Attending to continuous improvement across all parts of the system, schools can **collectively build capacity** with a focus on *Deep Learning and Precision in Pedagogy*, *Personalization*, and *Collaborative Cultures for Professional Learning*, as discovered in the work of Fullan, Hill, and Crevola (2006), and Fullan and Quinn (2016). Internal accountability depends on these core functions, and actions around these functions depend on data from comprehensive needs assessments, as well as appropriate modifications to policies and practices.

1. A Collaborative Culture for Professional Learning (Fullan, Hill, & Crevola, 2006; Fullan & Quinn, 2016)
Improvement involves change, and **change involves learning** (Fullan & Miles, 1992). Professional competence and **capacity building** are at the heart of professional learning goals and ventures. A **collaborative culture and appropriate organizational infrastructure** is necessary to facilitate the deep learning both educators and administrators require to make significant educational improvements. Moreover, research indicates that **social capital** (e.g. educators frequently conversing with and learning from trusted peers) can be a significant predictor of student achievement gains, above experience and ability. (Leana, 2011). Therefore, time should be structured for **ongoing, embedded professional learning,** which may include collaborative inquiry about data, instructional coaching, and co-constructing learning through practices such as instructional rounds (City, Elmore, Fiarman, & Tietal, 2011), and lesson study. **Professional learning community** meetings can be used to engage in collaborative inquiry around relevant data, and in relevant professional learning, as indicated in Vermont's Education Quality Standards (EQS). Professional learning--for educators and school leaders--should be connected to core priorities, consistent with needs reflected in the data and needs assessments, and connected to educator/administrator needs.

2. Personalization

Personalization is a **learner-centered approach** to education (Leadbeater, 2002). In personalized learning environments, school leaders and educators respond to student learning and motivational needs (Fullan, Hill, & Crevola, 2006), predictably bringing **student ownership, choice, and voice** to the foreground during their learning experiences. Educators can develop the **competencies** for personalized, learner-centered teaching outlined in such documents as: Educator Competencies for Personalized, Learner-Centered Teaching (Jobs for the Future, 2015), and collaboratively develop **personalized learning plans** with students using Vermont State Guidance on Personalized Learning Plans. Systemically, schools may also wish to attend to the conditions for **scaling personalized learning**, as documented in: District Conditions for Scale: A Practical Guide to Scaling Personalized Learning (Willams, Moyer, & Jenkins, 2014).

3. Deep Learning and Precision in Pedagogy (Fullan, Hill, & Crevola, 2006; Fullan & Quinn, 2016)

Improvement of practice and performance is at the center of this work. School leaders and educators must have the skills and knowledge necessary for large scale improvement. Pedagogical precision is a priority of effective schools, and collaborative learning opportunities are directly connected to a **deep understanding** of the process of learning and improvement of the teaching process (Fullan, Hill, & Crevola, 2006). Privacy of practice produces isolation and **isolation is the enemy of improvement;** therefore, leaders must create conditions where collective scrutiny of practice and collective learning is expected (Elmore, 2004). School systems can create **organizational infrastructures** that promote collaborative learning. These opportunities should allow for collective capacity building in the areas of **curriculum**, **instruction**, and **assessment**, including developing shared agreements about standards, criteria for proficiency, and high-yield instructional practices from evidence-informed sources, such as: TeachingWorks: High Leverage Practices (TeachingWorks, n.d.); TeachingWorks: High-Leverage Content (TeachingWorks, n.d.); Institute of Education Sciences Practice Guides (Institution of Education Sciences, n.d.); Competency-Based Education Series, Competency Works (Competency Works, n.d.); and Vermont State Guidance on Proficiency-Based Learning Systems. Precision in pedagogy and collaborative agreements depend on the collaborative structures for learning described in function #1.

STATEWIDE SYSTEM OF SUPPORT FOR CONTINUOUS IMPROVEMENT

To support and sustain school-based capacity building efforts for continuous improvement, our statewide system of support applies processes related to key features of continuously improving systems, which are aligned with the recommendations from Darling-Hammond and Plan (2015); these features include: *Learning Supports, Information Systems, Ongoing Review, Innovation and Evaluation, and Knowledge Sharing Strategies* (p. 13). Outlined below are various strategies for strengthening these features in our own statewide system.

A. Learning Supports:

Our system of continuous improvement is grounded in **reciprocal accountability** at all levels--State, LEA, and School; all members share a collective responsibility for education quality and equity in Vermont. Collectively, we must ensure that all schools have **sufficient resources** and an **organizational infrastructure** for ongoing, embedded, content-focused professional learning and support for continuous improvement of curriculum, instruction, assessment, and student support strategies (Darling-Hammond & Plank, 2015). Our state support plan focuses on six improvement principles recommended by Bryk, Gomez, Grunow, and LeMahieu (2015):

1. Making the work problem-specific and user-centered
2. Focusing on variation in performance
3. Understanding the system that produces the current outcomes

4. Examining relevant measures for improvement
5. Using disciplined inquiry
6. Accelerating learning through networking

B. Information Systems/Data Collection and Analysis:

Data-driven inquiry is the basis for culturally responsive pedagogy. Key to any form of improvement planning is a comprehensive needs assessment**.** Needs assessments should serve as the foundation for the schoolwide plan for continuous improvement. All strategies and activities should be informed by and aligned with the data it generates. Sources of data should consider structures, processes, and outcomes (e.g., Donabedian, 2005). Data analysis should drive student-centered curriculum development, instruction and assessment practices. A **multi-tiered system of supports** provides the framework to assess students' academic and behavioral needs, personalize learning, apply appropriate interventions and monitor progress (Vermont Statewide Steering Committee on RTI, 2014). Further, a **balanced, comprehensive assessment system** should include multiples measures for formative and summative assessments. Finally, a strong **teacher and leader evaluation system**, congruent with our Vermont Core Teaching and Leadership Standards, should include formal development structures embedded into the evaluation process that allow for specific feedback and the development of growth plans in which observers and educators determine **professional learning goals** and opportunities, connected to evaluation results and core priorities (Connally & Tooley, 2016).

C. Ongoing Review:

In addition to ongoing progress monitoring of continuous improvement plans, regular self-assessments and reviews can provide a wide range of data clarifying areas of strength and areas for improvement. Additionally, Vermont's peer **Integrated Field Reviews** will provide an external, qualitative assessment of Vermont Education Quality Standards, including commendations, and recommendations for improvement.

D. Innovation and Evaluation:

Many researchers believe that instructional systems should be conceptualized as ongoing research and development projects, or **practice-based research** (e.g., Fullan, 2006; Bryk et al., 2015). In such a system, refinement and continuous improvement is expected and practice drives theory, rather than the other way around. (Fullan, Hill, & Crevola, 2006)**.** Improvement and innovation depend on technical, human, and social capital, building capacity, and the system, since no single approach or policy can explain the success of all high performing systems (Hatch, 2013)**.** Innovative practices and evaluation processes, such as **rapid learning cycles**, can produce knowledge about what works, for whom, in which circumstances (e.g., Wagner, Wachen, Cannata, & Cohen-Vogel, 2015; Bryk et al., 2015). By adopting an **improvement science approach**, schools can apply **Plan-Do-Study-Act** cycles to innovate, test, review, and revise improvement strategies (e.g., Deming, 1993; Langley et al., 2009). Innovations may be developed in collaboration with colleagues, state personnel and researchers through **networking opportunities.**

E. Knowledge Sharing Strategies/Networking:

Improvement science approaches focus on maximizing the learning from improvement (Health Foundation, 2011). Schools improve by collaboratively engaging in the process of co-constructing knowledge and skills (Elmore, 2004). Therefore, to **sustain continuous improvement**, networks can serve as collaborative *knowledge-sharing vehicles* within and across schools (Darling-Hammond & Plank, 2015). Schools may share promising practices and engage in mutual learning opportunities by actively participating in **networked learning communities** (Katz, Earl, & Jaafar, 2009). Further, schools may actively participate in coordinated **networked improvement communities** determining **what works, for whom, under which conditions** (Cohen-Vogel, Wagner, Allen, Harrison, Kainz, Socol, & Wang, 2015). These types of community learning opportunities are

aligned with adult learning theory and standards for professional learning (Meister and Blitz, 2016). Further, they provide venues for strengthening social capital, building collective capacity, and co-constructing and applying knowledge/strategies for solving problems of practice.

Section 2: Education Quality Standards Companion

EQS RESEARCH AND RESOURCES COMPANION

Our Vermont Education Quality Standards (EQS), Vermont State Board Rule 2000, were established to ensure that "all Vermont children will be afforded educational opportunities that are substantially equal in quality…" (V.S.A. Title 16, § 165). Essential to their implementation is a deep understanding of these standards. To facilitate this understanding and support school systems in their efforts to implement effectively, we offer the following EQS Research and Resources companion resource. This document serves to help educators and administrators deconstruct the standards, as well as explore a variety of research supports and resources to build a thorough understanding of the standards and how to implement them across a system.

Academic Proficiency

[Standards and Courses ; Local Comprehensive Assessment System; Curriculum ; Instruction; Proficiency-Based Learning]

QUALITY CRITERIA:

1.1 Assessment is connected to the standards and curriculum, and results are used to inform decisions about instruction and interventions.

1.2 The SU/SD has a comprehensive, balanced assessment system aligned to standards, curriculum, and instruction, which includes formative, interim, summative and diagnostic measures that are cognitively demanding.

1.3 A clear emphasis on high levels of achievement is evident across EQS content areas. The SU/SD has a shared understanding of, and expectations for, high-quality instruction, as well as processes for setting clear, cognitively demanding goals for student achievement.

1.4 Learning is deepened through collaborative dialogue, inquiry, innovation and authentic, relevant learning experiences. Pedagogy is informed by evidence from research and is aligned to standards.

1.5 Students demonstrate a wide range of transferable skills in authentic learning experiences.

1.6 The school/SU/SD has a coordinated, written curriculum that is aligned with standards, instruction, and assessment and that builds knowledge on a continuum; this intended curriculum is enacted school/SU/SD-wide.

1.7 The school/SU/SD enacts a shared instructional framework and/or set of high-leverage, evidence-based practices.

SUPPORTING RESEARCH AND RESOURCES:

- Professional development should allow for collective capacity building in the areas of **curriculum**, **instruction**, and **assessment**, including **developing shared agreements about standards, criteria for proficiency, and high-yield instructional practices** from evidence-informed

sources such as: Teaching Works High Leverage Practices and Teaching Works High-Leverage Content, and Institute of Education Sciences Practice Guides.

- **Competency-Based** or **Proficiency-Based Education** is a system of academic instruction and assessments based on students **demonstrating mastery of the knowledge and skills** they are expected to learn before they progress. The general goal of proficiency-based education is to ensure that students acquire the knowledge and skills that are deemed to be essential to success in school, higher education, careers and adult life. There are a number of local, regional and national resources available to support this initiative, such as the Competency-Based Education Series, Competency Works, the Vermont Agency of Education Proficiency-Based Learning and Proficiency-Based Graduation Requirements, Achieve, and the Great Schools Partnership (GSP).

- A **balanced, comprehensive assessment system** should include multiples measures for formative and summative assessments. Additional resources can be found at the Stanford Center for Assessment, Learning and Equity, Edutopia and the Center for Collaborative Education. Publications from the U.S. Department of Education and the Rand Corporation provide additional information on the use of data in instructional decision-making.

- **Instructional best practices** are those teaching techniques that have been proven to be **highly effective** and are oftentimes **supported with research**. Many national resources are available to support quality instruction, such as the work of the Marzano Institute and the efforts of the Institute of Educational Sciences, through their What Works Clearinghouse, with emphases on improving student learning and promoting adolescent literacy. Additional assistance can be found on sites like The Teaching Channel, Visible Learning and Learn, Teach, Lead.

- **State and national standards** should form the backbone of high-quality instruction. The Vermont Education Quality Standards (EQS), provide a framework for high-quality, equitable education in the state, while the Common Core Standard serves as a roadmap for specific content to be taught. Additional resources include the Progression of CCSSM Standards, Learning Progressions Framework for CCSSELA/L, English Language Arts Competency Model and Provisional Learning Progressions, SBAC English Language Arts and Literacy Content Specifications, SBAC Mathematics Content Specifications

GUIDING QUESTIONS FOR:

Staff

- Please tell us about the research-based instructional practices you currently use in the classroom.
- Please tell us about your local comprehensive assessment system.
- How have you aligned criteria for proficiency with standards, high expectations, curriculum, instruction, and assessment?

- How do you ensure that your curriculum and instruction is cognitively demanding and allows high levels of achievement for students?
- How are you ensuring that curriculum is coordinated within schools/across grade levels and across the SU?
- How are you incorporating transferable skills into curriculum, assessments and daily instruction?
- How do you determine when students are proficient? How do you report this information?

Students

- How do you know when you are proficient/successful in your learning experiences? What happens if/when you are not?

Families

- What are your thoughts on the new proficiency-based learning system? How do you know when your child is meeting proficiency standards?
- Please share your thoughts about the school methods of assessment, grading, and reporting.
- What happens when your child is not meeting or exceeding proficiency in standards?

Personalized Learning

[*Flexible Pathways; Career and Tech Ed; Personalized Learning Plans; Graduation Requirements]*

QUALITY CRITERIA:

2.1 Comprehensive education and career/life personalized learning plans meet the diverse learning needs, interests, and aspirations of all students.

2.2 Students, parents, families, and educators understand the full ranges of pathways, programs, options and supports that are available.

2.3 Students build on in-school and out-of-school experiences to further explore and reflect upon their interests, strengths, skills and education and career/life aspirations.

2.4 The SU/SD implements a multi-tiered system of supports framework to differentiate instruction, adapt content and utilize digital tools and resources to create personalized learning opportunities that meet the diverse needs of all students.

2.5 The SU/SD provides technical assistance and professional development for educators and administrators to effectively integrate technology into teaching and learning, assessment design, data collection, analysis and reporting.

SUPPORTING RESEARCH AND RESOURCES:

- Educators can develop the **competencies** for personalized, learner-centered teaching outlined in Educator Competencies for Personalized, Learner-Centered Teaching and collaboratively develop **personalized learning plans** with students using Vermont State Guidance on Personalized Learning Plans.

- **Personalized learning plans** can include opportunities for **dual enrollment**, with student learning taking place through **more than one institution**, such as at their assigned high school and through **college coursework** or **outside technical training.** The following publications provide an introduction to these options: State Dual Enrollment Policies: Addressing Access and Quality, A Look at Best Practices and Lessons Learned Regarding a Dual Enrollment Program, Preparing for Productive Careers: Students' Participation in and Use of Career-Focused Learning Activities.
- Systemically, schools may also wish to attend to the conditions for **scaling personalized learning**, as documented in: District Conditions for Scale: A Practical Guide to Scaling Personalized Learning**.**

- **Student-centered learning** is an educational approach in which students influence the content, activities, materials, and pace of learning. This model places the **student in the center of the learning process.** Check out the Innovative Lab Network, a collaborative effort among states that are taking action to identify, test, and implement student-centered approaches to learning.
- **A Multi-Tiered System of Supports (MTSS)** model of teaching uses **data-based decision-making** to drive academic and behavioral instruction and intervention. Content is delivered to students in **varying intensities, or tiers, based on student need.** Vermont's field guide for MTSS and various resources from around the country, such as the Florida Center for Reading Research can be accessed to begin developing MTSS systems. Response to Intervention or Data-based Individualization is often used to refer to a MTSS-type system. The Center for Response to Intervention is another valuable source of information.

GUIDING QUESTIONS FOR:

Staff

- Tell us about the personalized learning process at your school.
- How will a school document progress and achievement in meeting the goals laid out in a student's PLP?
- How does the Personalized Learning Plan template provide opportunity for students to communicate their goals and interests?
- How does the Personalized Learning Plan template provide opportunity for students to establish or select a pathway toward graduation?
- What school practices, including pathways, already align with students being able to choose personalized learning pathways, and what practices will need to change?

- What processes will be used with faculty to ensure appropriate levels of rigor, personalization and equity within each pathway?
- How will the structure of the school change based on the identification of pathways?

Students

- Tell us about your personalized learning plan. How was it developed? Does it accurately reflect your goals and interests?
- How often do you refer to your PLP? How often do you have the opportunity to update or change it?
- In what ways do your teachers allow you to engage in learning experiences based on your interests or ideas?
- What opportunities outside of the classroom do you have to demonstrate proficiency?
- How do you show achievement of the goals stated in your PLP?

Families

- Tell us about your involvement in crafting your child's Personalized Learning Plan. How often are you updated about the plan?
- How have your child's learning experiences become more personalized?
- Tell me about a way in which your child's PLP has been used to make decisions about learning experiences in a class or outside of school.
- How can you tell your child is learning and meeting the goals outlined in his/her Personalized Learning Plan?

High Quality Staffing

[*School Leadership; Appropriately Licensed Staffing; Professional Learning; Staff Evaluation*]

QUALITY CRITERIA:

3.1 The processes, procedures, structures and products focus the operations of the school on internal accountability for highly effective teaching and learning, and high levels of student achievement.

3.2 Each member of the staff can explain how the vision and mission were developed and the relationship between these documents and daily instructional practices.

3.3 Processes and practices are designed to deepen understanding of the curriculum and refine instruction to improve student learning and achievement.

3.4 The SU/SD has a comprehensive plan to develop educator and administrator professional learning and regularly reviews the plan to ensure alignment with needs.

3.5 Professional learning, for educators and administrators, is systemic, data-driven, ongoing, embedded, evidence-based, and it builds capacity, contributing to a culture of learning.

3.6 A coherent system is in place for educators and SU leadership teams to collaboratively use appropriate data sets to evaluate existing programs and instruction for effectiveness, modifying and adjusting as analysis of evidence suggests.

3.7 The SU/SD has a coordinated system for evaluating teachers and administrators.

3.8 The SU/SD has appropriate policies and procedures in place to ensure that all teachers are appropriately licensed and qualified for their content areas.

SUPPORTING RESEARCH AND RESOURCES:

- Systematic, needs-driven and high-quality professional learning is essential to improving our schools. These efforts include opportunities that are both external, such as trainings **aligned with district and state goals,** and internal, such as **opportunities for collaboration and coaching:** Capacity Building Framework, Edutopia: Teacher Development, Coaching as Professional Learning: Guidelines for Building and Strengthening Effective Coaching, Developing Professional Capital in Policy and Practice, VT PLN Reflective Practice Modules.

- Evaluations of school staff should be **aligned to best practices in teaching and learning** and should serve dual roles of **guiding professional growth and determining effectiveness**. Formal evaluations should be **supplemented by ongoing opportunities for formative input, collaboration and self-reflection** around practice. Tools used in Vermont include the VT Guidelines for Teacher & Leader Effectiveness, The Danielson Framework for Teaching, the work of John Saphier/Research for Better Teaching and the InTASC standards developed by the Council of Chief State School Officers.

- An important role of **school leaders** is to establish the conditions where individual efforts coalesce to create sustainable school improvement. In fact, research has demonstrated that **the link between quality leadership and student achievement is one of the most significant in improving schools.** A number of local and national resources exist to support the development of highly-effective school leaders: Vision for Teaching, Leading and Learning in Vermont, the Vermont Principal's Association, Teacher Learning and Leadership Program, Center for Educational Leadership, National Association of Elementary School Principals, Effective Leadership in an RTI World: What Every School Administrator Needs to Know About Response to Intervention and Differentiated Instruction,

GUIDING QUESTIONS FOR:

Staff

- How are you planning for ongoing, job-embedded, needs-based professional learning within schools and across the SU? How is this planning linked to teacher/administrator evaluations?
- Tell us about how you use professional learning communities.
- How do you ensure that students in different classrooms are getting substantially equal learning experiences?
- Please tell us about your policies for recruiting, hiring and retaining educators.
- Please tell us about your current system for teacher evaluation/administrator evaluation. How do you ensure that educators get accurate, meaningful feedback and appropriate professional learning opportunities, directly connected evaluation results/feedback?

Students

- How do you use technology in your learning experiences?
- Are foreign languages taught in your school?
- Do you have AP courses in your school and if so, how many?
- Do you feel your teachers collaborate for the sake of assigning school projects and coordinating your time and talents?
- Do you feel all students in your school are making progress in learning?
- Do teachers use a variety of techniques to assess your learning?
- Do you believe there is a culture of high expectations for your performance from all of your teachers?

Families

- Are there any formal or informal ways in which you are able to offer feedback to the teacher or principal regarding their work?
- Do your student's teachers collaborate about your student's performance?
- Do you feel teachers adequately identify, clarify and address barriers to your student's learning?
- Do you get a sense there is collaboration and a real partnership with and among staff?
- Do you believe lifelong learning is encouraged and modelled in your child's school?
- Do you see evidence of curricular decisions, co-curricular decisions, and extra-curricular programs being designed, implemented, evaluated, and refined? If so, can you provide me with an example?

QUALITY CRITERIA:

4.1 Instruction and assessment are differentiated in response to student strengths, needs, and prior learning.

4.2 Timely and tiered interventions, supported by a team approach, respond to individual student learning needs and well-being.

4.3 Ongoing communication about school policies and practices is in place to allow students, educators and parents to monitor and support student learning.

4.4. Staff, students, parents and school community promote and sustain student well-being and positive student behavior in a safe, accepting, inclusive, healthy learning environment.

4.5 The SU/SD actively engages families and community members in building a shared vision and fostering a supportive culture.

4.6 The SU/SD actively promotes a shared vision and theory of action for equity, continuous improvement and high expectations for all students and staff; this vision is effectively communicated to families and community members.

4.7 Educators have a shared agreement of proficiency criteria for all content standards and a collective responsibility for student achievement and well-being.

4.8 The norms, values, standards, and practices associated with the school as a learning community demonstrate commitment to ensuring achievement for ALL students and organizational productivity.

4.9 The SU/SD uses a multi-tiered system of supports to provide appropriate academic and behavioral interventions including counseling services, positive behavior supports, restorative justice strategies, and/or resiliency training.

SUPPORTING RESEARCH AND RESOURCES:

- **A Multi-Tiered System of Supports (MTSS)** model of teaching uses **data-based decision-making** to drive academic and behavioral instruction and intervention. Content is delivered to students in **varying intensities, or tiers, based on student need.** Vermont's field guide for MTSS and various resources from around the country, such as the Florida Center for Reading Research can be accessed to begin developing MTSS systems. Response to Intervention or Data-based Individualization is often used to refer to a MTSS-type system. The Center for Response to Intervention is another valuable source of information.

- **School climate** has been identified through research as a crucial factor in **teacher performance and student success**. The following resources and publications give insight into this important consideration: Strengthening Student Engagement, The School Climate Challenge: Narrowing the Gap Between School Climate Research and School Climate Policy, Best Practice Briefs: School Climate and Learning, The Center for Improving School Culture.
- A focus on **Social and Emotional Learning** has been shown to s**trongly impact student performance** and promote positive life outcomes: Collaborative for Academic, Social and Emotional Learning (CASEL), The Prosocial Classroom: Teacher Social and Emotional Competence in Relations to Student and Classroom Outcomes, Cultural Competency: What it is and Why it Matters.

- An emphasis on **parent engagement and community involvement** is also indicated as a predictor of school success: School-Family Partnership Strategies to Enhance Children's Social, Emotional and Academic Growth, Parents and Learning, Handbook on Family and Community Engagement, Building the Future of Family Involvement.

GUIDING QUESTIONS FOR:

Staff

- In what ways do you typically differentiate learning experiences for ALL students?
- Please tell us about your multi-tiered system of supports and how it meets the needs of ALL students.
- What are your methods for implementing academic and behavior interventions?
- What type of supports do students have for social/emotional, health, and counseling issues?
- Tell us about the school-wide behavior expectations.
- Do you generally feel valued and important?
- Are the contributions you make as an individual acknowledged?
- Do you consider diversity in developing learning experiences?
- Do you feel administrators set high expectations for self, student, and staff performance?

Students

- Tell us about a place you enjoy or do not enjoy being in your school. Why do you feel this way?
- Do you feel like a contributing member of the school community?
- Do you feel safe and supported at school?
- Can you tell me how student accomplishments are recognized and celebrated?

Families

- Please share your thoughts about the overall climate and physical environment in the school.
- Do you know if the school climate is assessed on an on-going basis?
- Do you believe the school is organized and aligned for success?
- Do you know if student and staff accomplishments are recognized and celebrated?

Financial Efficiencies

[*Federal and State Entitlements: School Facilities and Learning Environment: Access to Instructional Materials: Reporting of Results*]

QUALITY CRITERIA:

5.1 The SU/SD has a clear and collaborative process for reviewing operations and programs to achieve efficiencies through coordination of federal, state, and local resources in an effort to make more effective use of resources to support student achievement.

5.2 The SU/SD has an effective system for collecting, maintaining, storing, and sharing accurate financial records and data.

5.3 The SU/SD maintains all buildings to code, in compliance with state and federal fire, health, safety, chemical and structural laws.

5.4 Schools are equipped with current and sufficient resources, technology, access, and space to provide quality learning experiences for all students.

5.5 School/SU/SD have efficient data systems and clear performance criteria; performance results are communicated to parents and community members.

SUPPORTING RESEARCH AND RESOURCES:

- An emphasis on **financial efficiency** and **transparency** is facilitated by the shift towards **data-driven, research-supported best practices in our schools**. By aligning funds with identified needs and high-impact, proven strategies for addressing them, LEA's become more cost-effective and resilient. Access the following resources for more insight:
  - Doing More with Less: three Strategies for Improved Resource Alignment, Education Resource Strategies: Doing More with Less: Four Strategies for Improving Urban District Quality and Productivity
  - Stretching the School Dollar: How Schools and Districts Can Save Money While Serving Students Best
  - Stretching the School Dollar: A Brief for State Policymakers
  - Smart Money: Using Educational Resources to Accomplish Ambitious Learning Goals
  - Quality Counts 2011, Uncertain Forecast: Education Adjusts to a New Economic Reality
  - Return on Educational Investment: A district-by-district evaluation of educational productivity
  - The Productivity Imperative: Getting More Benefits from School Costs in an Era of Tight Budgets

GUIDING QUESTIONS FOR:

Staff

- Please tell us about the overall quality of resources/facilities in providing equitable and effective educational experiences for all students? Do you notice any inequities in resource distribution?
- How well do you think the SU uses financial resources?
- What is the superintendent's/board's role with the finance of the school system?
- Please walk us through how you determine staffing needs.
- Does your school have the resources to integrate technology across the curriculum?
- Does the LEA identify predictive progress monitoring measures to be analyzed throughout the year for assessing program outcomes?
- Does the LEA support administrators and teacher leaders in identifying the implementation actions that are required to achieve goals and allow for an effective evaluation of the activity or program under review?
- Are there consistent interactions among and between school staff, administration and students that is defined by trust, respect, open communication, and clear, shared expectations?

Students

- Do you have the resources you need to learn at school (e.g., books, technology, etc.)?
- If something is missing, what is it and how would it help you learn?
- Do you have the opportunity for project-based learning in and out of school?
- Do you have a Guidance Counselor who talks with you about Career Clusters?

- Are you exposed to career opportunities in your school?
- Do you have the opportunity for internships in your school?

Families

- How well do you think the SU uses financial resources to support your child's education?
- How well do you understand the budgeting process for your children's school?
- Do your students ever come home and tell you they feel they are missing the resources to learn?
- Do your students take school sponsored field trips?
- Do you feel your school uses its resources adequately to prepare your student for career and college readiness?
- Do you feel the LEA sets ambitious but reasonable goals related to specific activities, programs or interventions?
- Does the LEA assess the quality of implementation efforts by varying employee groups?
- In your opinion, does the school and LEA support programs that model personalized learning environments which support *ALL* students by designing curriculum, supports, structures, individualized assessments and a learning climate focused on student needs, interests and development?

Section 3: Continuous Improvement Planning Process, Explanation and Resources

CONTINUOUS IMPROVEMENT PLANNING

A continuous improvement culture requires a **commitment** to ongoing **collaborative inquiry** with multiple sources of data to ensure i**nternal accountability.** Appropriate **structures and practices** must be in place to foster this commitment. The purpose of the continuous improvement process and plan is to use **cycles of learning** to monitor and **document the impact** of strategic improvement actions/changes. Improvement decisions should be based on the instructional core and the Vermont Education Quality Standards. Figure 2 depicts a model for improvement based on the work of *Associates in Process Improvement* (Langley, Moen, Nolan, Nolan, Norman, and Provost.2009) which integrates a **Plan-Do-Study-Act** iterative protocol and the following questions: *What are we trying to accomplish/improve? What change can we make that will result in improvement? How will we know our interventions/innovations resulted in improvements?*

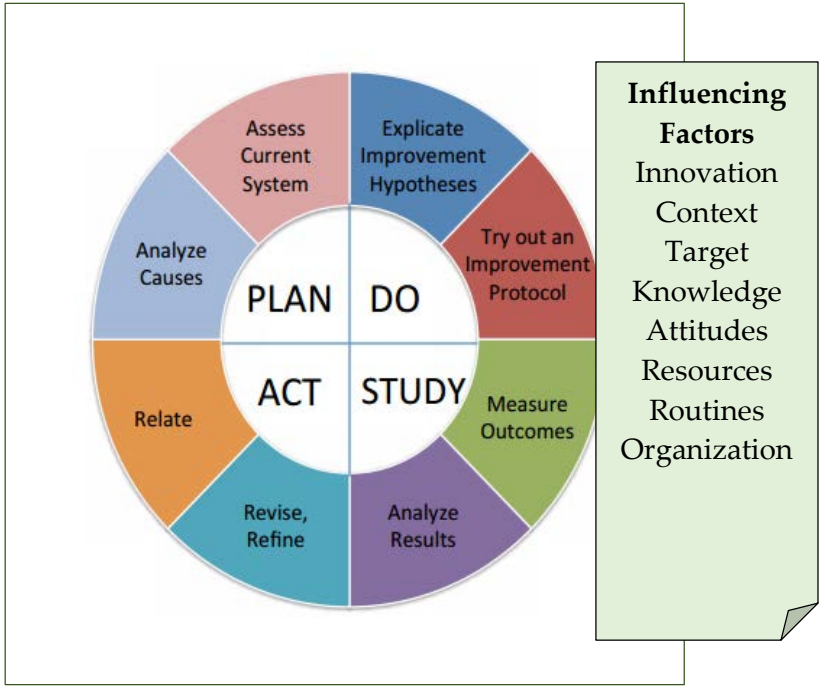

Figure 2: Based on the Plan-Do-Study-Act cycle and Model for Improvement (e.g., Deming, 1993; Langley et. al, 2009).

Planning:

- Develop a deep understanding of the EQS and the Education Quality and Continuous Improvement Framework.
- Conduct comprehensive needs assessment.
- State goals/aims, which are connected to EQS and will most impact student learning (AIM)
- Determine how you will measure impact of priority strategies for improvement; what metrics will be collected? (MEASURES)
- Explicate improvement hypothesis: Develop a theory of action and logic model for core priority strategies for improvement (with supporting research and evidence). (CHANGE/INNOVATION/INTERVENTION)

Doing:

- Carry out the plan, document data and begin to analyze.

Studying:

- Analyze results, measure outcomes, and share results with staff and stakeholders on an ongoing basis.

Acting:

- Adapt, adopt, or discard actions in response to data and evidence gathered through data analysis/monitoring/reviews.

THE CONTINUOUS IMPROVEMENT PLANNING PROCESS

CONTINOUS IMPROVEMENT PLANNING RESOURCES

Data Analysis:

Guide for Conducting a Comprehensive Needs Assessment
A Practical Framework for Building a Data-Driven District or School
The Data Informed District: Research on Using Data to Inform Practice
Use of Data at the Local Level: From Accountability to Instructional Improvement
Data Wise Process
REL Data Literacy Modules
Colorado CNA process
Virginia CNA process
RCA Process PDF
Colorado Root Cause Training Kit
Using Data to Support Instructional Decision Making: Practice Guide

Logic Models:

Turnaround Theory of Action and Logic Model
Center for School Turnaround Modules
REL Logic Model Series

Leadership:

Center for Educational Leadership
National Institute for School Leadership
Turnaround Leader Competencies
Turnaround Leader Actions
Measuring School Turnaround Success
Principal Competencies
Performance Management Resource
Performance Management Toolkit

Improvement Science, PDSA Cycles, and Networked Improvement Communities:

Improvement Science 2
Structured Networked Improvement Communities
AERA Webcast 1
AERA webcast 2
REL Workbook: Continuous Improvement: A Practical Approach to Educational Improvement

Evidence-Based Strategies:

IES Practice Guide: Organizing Instruction and Study to Improve Student Learning
IES Practice Guides and Intervention/Study Reports
Institute of Education Sciences (including WWC and Practice Guides)
Evidence-Based Interventions: A Guide for States
National Center on Intensive Intervention
SEDL
Center on Response to Intervention
USED Guidance for Using Evidence to Strengthen Investments
Evidence Provisions of ESSA

Pedagogy:

Teaching Works
Stanford Center to Support Excellence in Teaching
Teacher Education by Design Project
Curriculum.org and critical pathways
The Teaching Channel
Success at the Core
Achieve the Core
Edutopia
Inside Teaching
KIPP Resource Library
Annenberg Learner
Center for Collaborative Education
Hattie's Meta-analyses
CCSSO Resources
Learning Forward

Systems Change:

Michael Fullan on Whole System Reform
Systems Thinking for School System Leaders
Systems Thinking and the Learning Organization: The Path to School Improvement

THE COMPREHENSIVE NEEDS ASSESSMENT

Purpose

Key to any form of improvement planning is a comprehensive needs assessment. A comprehensive needs assessment is a form of **structured decision-making** and serves as the initial phase in continuous improvement planning. This self-assessment process is intended to promote a culture of reflection, collaborative inquiry, deep learning, and shared responsibility for continuous improvement at the school and LEA level. The needs assessment considers a range of needs and problems of practice. Designed innovations and interventions should be informed by and aligned with the data it generates. During this process, schools explore assumptions about problems of practice by analyzing data from multiple sources, considering the beliefs and practices that are problematic (Mintrop, 2016). During a needs assessment, consider the following three components:

A. Collaboration

The comprehensive needs assessment team should include necessary and diverse **stakeholders representing all parts of the system**, including educators, administrators, school board members, families, and community members.

B. Focus

The comprehensive needs assessment priorities should be directly related to the **instructional core** --the students, the teachers, and the content (City, Elmore, Fiarman, & Tietal, 2011)--and **factors having the greatest impact on student achievement** and well-being. **Multiple sources of data** from the focal areas are analyzed to identify problems and root causes. The focus for improvement should be needs-based and driven by the data and evidence generated during this assessment.

C. Data Collection and Analysis

Data analysis involves collaborative inquiry with multiple sources of data (the data must identify gaps and areas for improvement). Sources for data analysis may include: standardized and classroom-based assessments, surveys, integrated field review reports, graduation rates, interviews, instructional practice videos, observations, and evaluations. Data analysis results are then used to prioritize needs, determine root causes, determine goals for continuous improvement, and design strategic actions to follow. It is important to understand the nature of the challenges to select the appropriate strategy for intentional interruption (Katz, Earl and Jaafar, 2009).

Part 1: Comprehensive Needs Assessment

Improvement Principles

Consider the 6 improvement principles throughout the planning process:

1. Making the work problem-specific and user-centered;
2. Focusing on variation in performance;
3. Understanding the system that produces the current outcomes;
4. Examining relevant measures for improvement;
5. Using disciplined inquiry; and
6. Accelerating learning through networking (Bryk, Gomez, Grunow, and LeMahieu, 2015).

Identify Improvement Needs

Assess and understand current state/organizational performance; identify root causes; analyze data; identify core priorities; identify potential evidence-based strategies, establish goals, measures, strategic objectives and actions that support core priorities.

Shared Vision:

In developing or strengthening the vision, teachers, families, and community members collectively talk about their desires for students and community, thinking and acting, "with the power they already have, about the things that are important to them." (Senge, Cambron-McCabe, Lucas, Smith, Dutton, and Kleiner, 2000).

Guiding Questions:

- Are current strategies, tactics, and behaviors consistent with the current mission, core beliefs, and core values?
- What elements are easy to see and confirm their presence in the building?
- Which elements are not visible and require investigation to confirm their presence?
- If the building were observed for days, where would the Vision have been seen in action?
- What might be observed that could be considered incongruent with the Vision?

Actions	Guiding Questions	Resources
Prepare for collaborative inquiry: ▪ Ensure all essential people are involved. **Review current performance:** ▪ **Examine data from all 5 component areas of EQS**  ▪ **Identify and understand the current state** (strengths, problems/areas for improvement) ▪ **Identify gaps between current and expected state** (connected to instructional core)	**How do we understand the problem(s)? What are we trying to accomplish?** What do we know about our current situation? What information do we have available? What trends and issues do the data reveal? What would success look like? Based on our data overview, what are our systemic strengths and areas of focus? Focal areas are directly related to EQS components and state long-term goals. See **EQS Research and Resources Companion** in the **Appendix** for specific guiding questions in each of these 5 areas. 	Organizational Conditions for Continuous Improvement Practical Measurement for Improvement-Examples Data Wise Process and Free Online Course REL Data Literacy Modules A Practical Framework for Building a Data-Driven District or School The Data Informed District: Research on Using Data to Inform Practice Use of Data at the Local Level: From Accountability to Instructional Improvement Protocols for Data Analysis Colorado CNA process Virginia CNA process Park Manor Coherence

Collaborative Stakeholders Represented: *The needs assessment team should include necessary and diverse* ***stakeholders representing all parts of the system****, including school board members, students, families and community members.*
Broad Area(s) of Focus Based on Data Review: *Describe the broad area(s) of focus, directly related to state long-term goals and the 5 component areas of EQS, e.g., Academic Proficiency; Personalization; High Quality Staffing; Safe, Healthy Schools; and Financial Efficiencies*
Identified Priority Problems/Problems of Practice: *Based on the identified broad focus areas, dig deeper into the data to determine the focused, learner-centered, prioritized problems for which you intend to seek innovative solutions/interventions*

Actions	Guiding Questions	Resources
Fully understand the problem(s), determine root cause(s) and establish core priorities/goals: ▪ Dig deeper into the data (considering all pedagogical data) and information available to determine the root cause of identified problems. ▪ Consider *structures, procedures, and outcomes* in the following areas: -Change in Teacher and Leader Practice/Pedagogy -Student Progress and Achievement -Student Safety and Climate -Family and Community Engagement	[*Root-cause analysis* is a process used both reactively, to investigate an adverse event that already has occurred, and proactively, to analyze and improve processes and systems before they break down (Preuss, 2003).] How can we use all available information and data to dig deeper into the root cause of our priority problems? Who else needs to provide input? Based on our root cause analysis, what are our core priorities/goals within our broad focus area? What data are we using to make these determinations?	RCA Process PDF Improvement of Student Performance using Root Cause Analysis Diagrams for Conducting Root Cause Analyses Fishbone (Ishikawa) Diagramming Process for Root Cause Analyses Colorado Root Cause Training Kit Guidance for selecting evidence-based strategies

Root Cause Analysis Results: *Provide a brief narrative describing the results of your root cause analysis for prioritized problems; include the major factors contributing to each problem.*
Theory of Action: *Based on needs assessment results, data analysis, and research support, define your* ***theory of action*** *for this goal.*

Part 2: Plan Changes for Improvement

Please complete for each prioritized goal; add additional rows as needed.

PLAN CHANGES FOR IMPROVEMENT	
Guiding Questions	**Resources**
<u>What changes can we make that will result in an improvement?</u> **<u>How will we know that our change *is* an improvement?</u>** What will success look like? How will it be measured? What strategic actions must we take related to these changes? Why? What research/data are we using to justify these decisions? What **evidence-based processes, curriculum, pedagogy, and assessments** align with our vision and plans for change? How? What **impacts** do we expect and by which criteria we will measure impact? How will we **monitor progress** along the way? What **resources and knowledge** do we have/need? What **professional learning** needs to happen? How will we strengthen a **collaborative culture for professional learning** to build capacity for **precision in pedagogy** and **personalized learning,** through coaching, modeling, partnerships, professional learning communities, instructional rounds, lesson study, etc.? **What systemic changes will we make in the following areas:** instructional systems and practices; organizational and performance management routines; culture; staffing; scheduling; evaluation processes; professional learning; student safety and climate; and family and community engagement	Turnaround Theory of Action and Logic Model Center for School Turnaround Modules REL Logic Model Series

Plan	
What do we want to accomplish?	*Describe your prioritized (SMART) Goal(s)* *Optional: You may wish to complete and attach a logic model*
What change can we make that will result in improvement?	*Plan evidence-based improvement actions. Cite evidence-based strategies directly to EQS components; see resource section of Education Quality and Continuous Improvement Framework for examples.*
How will we know our interventions and/or innovations resulted in improvements?	*In specific terms, describe the measures you will use to determine success and the intended results*
Funding Source(s)	*Please specify local or federal funding sources (e.g., Title I 1003a).*

Do	Study	Act
TEST innovations or interventions and align action at all levels of the organization. Educate and train staff; communicate information/expectations; test strategic processes; ensure fidelity to the plan at all levels of the system; embed appropriate professional learning; and collect relevant data (e.g., assessments, surveys, instructional practice along the way. Document information, data, and feedback (describing what happened during implementation) that will assist during the next phase of the cycle.	**MONITOR PROGRESS AND EVALUATE RESULTS:** Explain when and how you monitored the progress of the innovation/intervention against your goals and objectives. What can you conclude? **Guiding Questions:** What do the data reveal? How did our strategic actions impact student achievement and well-being? **What is working, for whom, in which circumstances?** **Was the change an improvement?** What is not working? Why? What **adjustments** may need to be made?	**REVISE:** Explain when, how, and why you adjusted, or continued, selected innovations/interventions.

Sustainability
Plan for sustainability: Explain how you will implement, scale, and sustain the successful practices and processes tested during this improvement cycle; include personnel, financial resources, scheduling, and potential organizational/structural modifications.

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