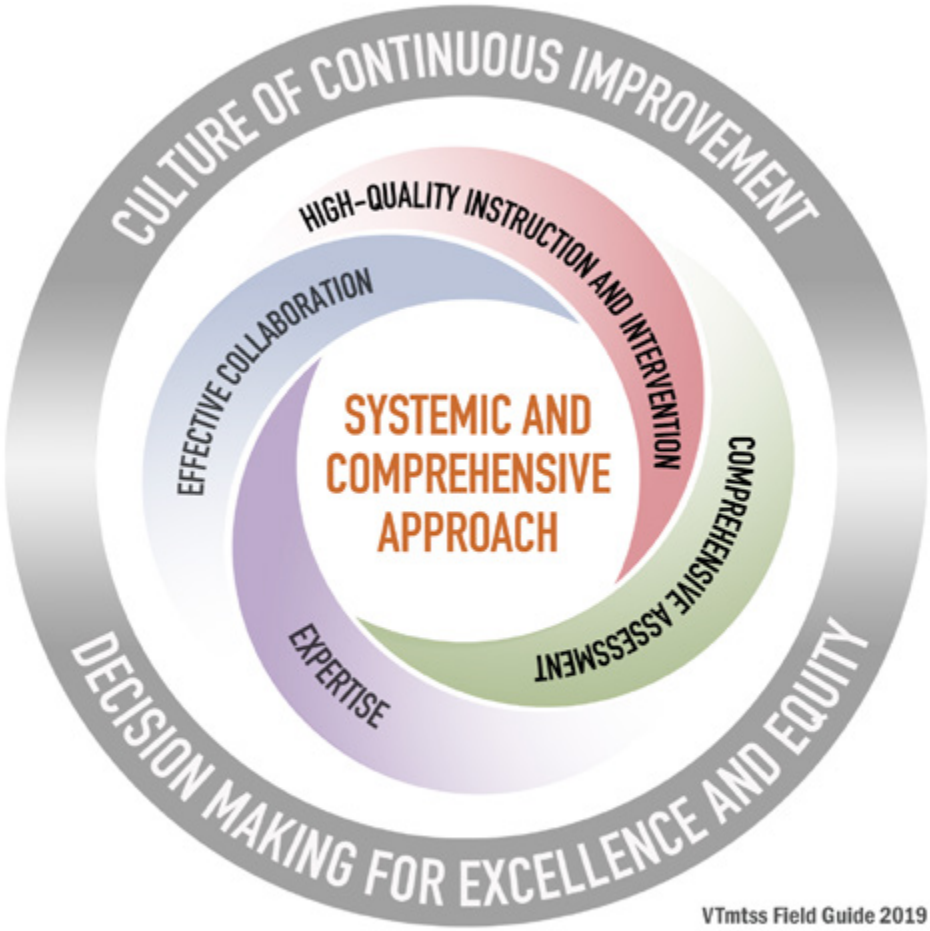

VTmtss

FIELD GUIDE 2019

The Vermont Agency of Education's
Multi-tiered System of Supports Guidelines

VERMONT
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Every effort has been made to create a Field Guide that is readable and useful. To that end, footnotes have been used throughout. These serve three purposes; (a) to reference research and provide citations using APA style uniquely placed at the bottom of the page, (b) to provide clarifying information, and (c) to identify additional resources at the point of reference. A Complete APA-style list of references is located in the final section of the Field Guide.

The VTmtss Framework and these guidelines are supported by the Vermont Agency of Education VTmtss Team.

Documents referenced in this publication are accessible at the Vermont Agency of Education website.

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Introduction to VTmtss

The *VTmtss Field Guide 2019* presents an expanded framework for enacting a multi-tiered system of supports with a uniquely Vermont focus. The goal of the **Vermont Multi-Tiered System of Supports (VTmtss Framework)** is to guide Vermont educators as they work to prevent difficulties and pro-actively provide appropriate supports so that *all* students can succeed. This edition reflects a renewed and strengthened commitment to promoting rigorous outcomes for everyone, especially for students who have been historically marginalized or underperforming, or both.

VTmtss is fundamentally about changing opportunity for all students. Unequal opportunities outside of schools, and the debilitating effects of those inequalities, have been widely acknowledged. Educators, policy makers and communities are coming to see that schools too often extend and exacerbate inequities. In a comprehensive review of equality in American education, O'Day and Smith delineate the ways that schools have failed to provide effective support for the most vulnerable students and their families. They also identify specific steps that can be taken to improve outcomes and conclude that "many of the ingredients for serious reform exist."[1]

Among the lessons learned from O'Day and Smith's work is an important one for Vermont: *context matters*. This edition serves as an overview of *Vermont's* approach to a multi-tiered system of supports. It provides guidance on key components, while intentionally allowing considerable latitude to individual schools and districts to work with existing successful initiatives, programs, approaches and tools. VTmtss promotes a systemic approach that acknowledges the importance of cultural context and connects schools with services and institutions in the community.

There are explicit connections to the larger Vermont educational landscape so that schools and districts can see how the VTmtss Framework components and initiatives reinforce, support and inform each other (e.g., proficiency-based learning, positive behavior supports). To be effective, these connections need to create coherent opportunities and be well-integrated. VTmtss can serve as a framework to organize these efforts.

Research shows definitively that piecemeal reforms do not work. They are unsuccessful because they present specific actions as proxies for a more coherent and unified approach. Consequently, they neglect the unique context and history of each district and each school's distinctive school culture.

> The term **school culture** generally refers to the beliefs, perceptions, relationships, attitudes, and written and unwritten rules that shape and influence every aspect of how a school functions, but the term also encompasses more concrete issues such as the physical and emotional safety of students, the orderliness of classrooms and public spaces, or the degree to which a school embraces and celebrates racial, ethnic, linguistic, or cultural diversity.[2]

This definition is entirely aligned with Vermont's definition of "school climate."[3] The *VTmtss Field Guide* is organized around principles of school culture in order to signal a movement away from quick fixes and toward a robust, systemic approach to school enhancement, improvement or change.

1 O'Day & Smith (2016), p. 351.
2 Great Schools Partnership (2013), para. 1.
3 For a broader discussion of healthy and safe schools, see Vermont Agency of Education, School Climate.

ABOUT THIS EDITION

The first *Field Guide* was published in 2014, after two years of work by a committed group of Vermont professionals. Their work continues to be the foundation for this edition. However, after five years, there was a need to capture the new policies and practices that have emerged from bold and fresh thinking at all levels of the educational enterprise.

Vermont's 2014 Education Quality Standards (EQS) articulate a strong vision for improving educational opportunities and urgently advancing **equity** for all students in every school district.

> Educational equity means that every student has access to the educational resources and rigor they need at the right moment in their education across race, gender, ethnicity, language, disability, sexual orientation, family background and/or family income.[4]

Every Vermont educator and *all* associated education professionals are being asked to ensure that each student has access to appropriate instruction and instructional support so that they can acquire the knowledge and skills necessary to meet challenging high school graduation proficiencies.

Vermont legislative policy and the federal government echo these themes. Vermont's EQS argue that educational systems in the state must, "ensure that all students in Vermont public schools are afforded educational opportunities that are substantially equal in quality, and enable them to achieve or exceed the standards approved by the State Board of Education."[5] At the federal level, the Every Student Succeeds Act (ESSA) passed in 2015, reauthorizing the Elementary and Secondary Education Act, placed a renewed emphasis on equity and on improving educational achievement for all students, with a particular focus on closing the achievement gaps that persist in so many schools across the country, including those in Vermont.

In preparing this edition, many sources were consulted: written documents, legislative summaries, survey data from 250 Vermont schools and 53 districts and Supervisory Unions, published research and policy statements, and state education websites from around the country. In addition, more than 50 Vermont educators and Vermont Agency of Education (VT AOE) professionals were interviewed.[6] You will find some new sections and materials in this edition; although, it retains portions of the first *Field Guide* that were viewed as most essential by professionals throughout Vermont. Importantly, it retains its distinctly Vermont flavor, reflecting the directives and policies that represent our values and priorities. This is consistent with the federal government's stance that states and districts should have the flexibility to establish approaches that reflect their communities' unique situations.

OVERVIEW OF VTmtss

Vermont educators are being called on to ensure that a multi-tiered system of supports is in place for *all students*. The implementation of VTmtss may vary according to the specific contexts, cultures and needs of schools and districts across the state.

The VTmtss Framework is a systemic approach to decision-making for excellence and equity within a culture of continuous improvement that focuses on successful outcomes for all students. This systemic approach:

4 America's Promise Alliance, The Aspen Education & Society Program, & the Council of Chief State School Officers (2018), p. 5.
5 Vermont State Board of Education (2014), p. 1.
6 See Acknowledgements

- Supports the effective collaboration of all adults to meet the academic, behavioral, social and emotional needs of all students;
- Provides a layered system of high-quality, evidence-based instruction, intervention, and assessment practices that are matched to student strengths and needs;
- Relies on the effective and timely use of meaningful data;
- Helps districts and their schools organize resources to accelerate the learning of every student, and;
- Engages and develops the collective expertise of educators, students, family and community partnerships.

The VTmtss Framework:

- Unifies general and special education in intentional, ongoing collaboration;
- Provides a layered system of high-quality, evidence-based instruction, intervention and assessment practices matched to student strengths and needs;
- Relies on effective and timely use of meaningful data;
- Helps schools and districts organize resources to accelerate the learning of every student;
- Engages and develops the collective expertise of educators, students, families and community partnerships; and
- Employs a systemic approach to decision-making and continuous improvement that ensures positive outcomes for all students.

Layered Supports and Tiers

Perhaps no single concept has caused more confusion than the notion of "tiers." In the first *Field Guide*, care was taken to limit the possible misuse of this concept. The interactive and unified graphic avoided a hierarchical perspective, such as a pyramid; there was a limited vision of a tiered system; and a clear statement noted that a multi-tiered system of supports did not require any specific number of tiers. However, one impression was left unchallenged: that tier 1 and, possibly, tier 2 were the domain of the classroom teacher, and thereafter specialists would provide additional instruction and intervention.

Not surprisingly, because the idea of tiers was so powerfully linked to ambitious goals for all students and educators, it attracted a lot of attention. However, some unfortunate practices have emerged. In this edition, it is our intention to be very clear about several of these:

- Instructional supports, practices and interventions can be tiered – students can not! There are no "tier 2 students" (or tier 3 or tier 1). By assigning this type of label to students we make their current status permanent. That is the antithesis of the concepts underlying a multi-tiered system of supports.
- There is no specific number of tiers required in a multi-tiered system of supports.
- Layers of support are not necessarily sequential. Students may be accessing more than one type of intervention or additional support at a time.
- The types of support students receive do not supplant access to universal instruction. Supports provide additional instruction.
- Specific professionals are not automatically attached to any tier.

Layered supports retain the important elements of tiers that require all district educators to respond as early as possible when students evidence difficulty in academic, behavioral or social-emotional areas. The use of layered supports is described more fully in "High-Quality Instruction and Intervention" (Component 3).

Throughout this edition, you will find a much more nuanced discussion of intervention and supports, which reflects both the changing policy and practice context described above and the greater empirical understanding that more is required to help all students succeed.

Framework for Improvement

VTmtss is a framework for unifying a progressive system of supports, personalization, flexible pathways and proficiencies. In the *VTmtss Field Guide*, we have retained both the **Guiding Principles** and the five **Components** of the first *Field Guide*. Descriptions of each of the original components have been revised to reflect current research and practice and to emphasis how these *reinforce each other.* A new section, "VTmtss in Action," emphasizes how these reinforcing and interacting components are used to establish and propel decision-making within a **culture of continuous improvement**. Finally, in the graphic, a culture of continuous improvement and **decision-making for excellence and equity** encircle the five components in an overarching call to action (see Figure 1).

The VTmtss Framework continues to support a focus – among both general and special educators – on preventing academic, social-emotional, and behavioral difficulties by anticipating needs and preparing for a quick response while improving learning for all students through increasingly differentiated and intensified assessment, instruction and intervention. The VTmtss Framework can still be used as an alternative to the discrepancy model for determining learning disability, but that is only one of the many types of decisions that can be supported within VTmtss. In this edition, the framework (and the legislative actions that support or mandate it) has been strengthened and expanded. It is both a framework for decision-making and a call to action.

WHAT'S NEW IN THE VTmtss FIELD GUIDE?

- Discussion of **social-emotional concerns** and **Specific Learning Disability (SLD) determination**
- An explicit discussion of **cultural** contributions to school improvement
- **Practical Matters** discussions for each component
- A new section, **VTmtss in Action**, that addresses how to use the Systemic and Comprehensive Approach for **Decision-Making**, **Continuous Improvement** and **Problem Solving**
- A set of **Vignettes** showing how Vermont schools are using the VTmtss Framework to address questions and make decisions about eligibility for special education, students' social and emotional well-being, improving school-wide mathematics, high-quality instruction and intervention early learning and layering supports in a high school environment
- **Updated Self-Assessment Tools** for schools or school districts (available 2020)
- A **Digging Deeper** section that provides further resources and information about each component

The *VTmtss Field Guide* is intended to provoke conversation and reflection, provide information about effective practices, and support collaborative and systemic efforts to improve outcomes for all students.

THE FIVE COMPONENTS

Figure 1 VTmtss Graphic

The discussion of the VTmtss Framework that follows starts with a consideration of a systemic and comprehensive approach and ends with a focus on action.

- There are five interrelated **components** vital to the VTmtss Framework: Systemic and Comprehensive Approach, Effective Collaboration, High-Quality Instruction and Intervention, Comprehensive and Balanced Assessment, and Expertise.
- An **overarching wrap-around** reinforces the purpose of VTmtss: to create contexts and cultures that result in rigorous and equitable outcomes for all students and to propel users of the VTmtss Field Guide to action.
- VTmtss serves as a systemic, **decision-making framework** to help schools and districts focus on aligning current work with any new strategies as they are adopted.
- No single component of the VTmtss Framework is a proxy for all the others. They **work in concert** and districts will be most successful when continuous improvement is coordinated between and among the intersecting components.

Guiding Principles

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Principle 1
Success begins with committed educators who believe that all students learn and can achieve high standards as a result of effective teaching.

Principle 2
A well-developed, coherent and comprehensive **system** ensures **equity** by providing an appropriate context for learning with layered supports and **personalized** instruction for **all students**.

Principle 3
Effective and committed leadership at all levels of the system is crucial for guiding and sustaining educational excellence and equity.

Principle 4
A system supports all students by providing each student with the highest quality classroom instruction – instruction that is informed by research, supported by a standards-based curriculum and provided by highly-qualified educators.

Principle 5
A coherent, articulated, **balanced and comprehensive assessment system** guides responsive teaching, informs educators and students about progress, and leads to effective decisions within a continuous plan for improvement for both students and systems.

Principle 6
Student proficiency increases when expert professionals analyze and use ongoing performance data to inform decisions and provide instruction that is responsive.

Principle 7
Instruction and intervention are culturally sensitive, based on solid research and allow teachers to use formative assessment and keen observation to engage in responsive teaching.

Principle 8
The foundation for effective problem-solving and instructional decision-making is a dynamic, positive and productive **collaboration** among students, families and professionals.

Principle 9
Ongoing professional learning for all members of the school community is needed to build capacity and sustain progress.

Principle 10
These principles are **interrelated** and most effective when **integrated within a coherent plan for continuous improvement** that recognizes how recursive assessment, reflection and adaptation improve instruction and increase student achievement.

Component 1: A Systemic and Comprehensive Approach

VTmtss (see p. 5) has a systemic and comprehensive approach at the center of the framework for two overriding reasons. First, several decades of research have demonstrated that school improvement, change in instructional practice and improvements in student achievement can only be truly effective and sustainable when they occur within a systemic and comprehensive framework.[1] Second, if we really expect Vermont schools to support *all* students and make equitable outcomes a reality for *each of them*, then we need to engage the expertise and resources of the entire system. No one person or unit of the organization can accomplish this alone. The enterprise requires a diversity of expertise and sustained attention across ages and grades. Isolated pockets of excellence in a school district are not enough.

VTmtss calls for a systemic approach, but one that is also **comprehensive**. The VTmtss Framework is used to unify the work of the *entire organization*. A systemic approach calls for alignment of reform efforts across all participants and policies of the educational system, "because it will produce more sustainable changes and better use of limited resources."[2] A systemic approach to decision-making considers how existing resources and practices can be brought to bear on a problem. Importantly, this approach can anticipate how one possible solution may impact other aspects of the system, and it also discourages piecemeal strategies.[3]

Principle 2
A well-developed, coherent and comprehensive **system** ensures **equity** by providing an appropriate context for learning with layered supports and **personalized** instruction for **all students**.

1 Huie et al. (2004); Lipson, Mosenthal, Mekkelson, & Russ (2004); Newman & Wehlage (1997).
2 National Academies of Sciences, Engineering, and Medicine (2005), para. 5.
3 See Practical Matters for a discussion of aligning initiatives, p. 13.

WHAT IS A SYSTEMIC AND COMPREHENSIVE APPROACH?

When community members and educators use the term **school system** it gives a nod to the fact that schools exist as a *collection of interacting, interrelated and interdependent elements*.[4] Any effort to strengthen or enhance a system necessarily involves making sure that each of the interacting and interdependent parts are supporting each other.[5] Contemporary systems thinking also highlights the fact that attempting to change or "fix" one element in the system does not necessarily improve the system as a whole and, in fact, may have deleterious consequences. This is one of the reasons why the *VTmtss Field Guide* emphasizes how important a strong PreK–12 school system is to enacting the VTmtss Framework. Each of the components is described separately to reinforce its importance, but systemic and sustainable success requires attention to all of them.

Systems change often requires a shift in thinking on the part of people in the system. Their values, beliefs and attitudes play a pivotal, often defining, role in determining what direction is taken. Real, enduring change is complex. It requires commitment and creative thinking, as well as careful attention to the context and culture of the organization.[6]

A SYSTEMIC CULTURE OF GROWTH AND IMPROVEMENT[7]

Systems, especially educational ones, involve buildings, programs, materials and – most importantly – people. Various elements of the system, such as institutional history, past practice, curriculum, facilities and standards, need to be examined for their contributions to the current culture. However, the *culture* of a system often resides most powerfully in the mental models that members of the community build and maintain.[8]

Principle 1
Success begins with committed educators who believe that all students learn and can achieve high standards as a result of effective teaching.

Mental models are deeply ingrained assumptions, generalizations or even pictures or images that influence how we understand the world and how we take action. Very often, we are not consciously aware of our mental models or the effects they have on our behavior.

Scholars and researchers have demonstrated that mental models are critical to understanding why systems work the way they do and how that leads to specific results. VTmtss rests on a mental model that cultivates equity. The model asserts that "inclusive education can be beneficial to students who need intensive support, particularly when all staff work together to provide meaningful and supported instruction and foster the students' full membership and participation with classmates" in general education settings.[9]

The interplay between explicit policies and procedures, less-visible beliefs and embedded practices is shown in Figure 2. The figure invites participants to look at the alignment of stated policies and day-to-day actions. Not infrequently, articulated policies and procedures are not entirely aligned with actual practices. This type of dissonance can impact effectiveness across all aspects of the system.

4 Kauffman (1980); See also Ackoff (1971).
5 Cowan, Joyner, & Beckwith (2012a; 2012b).
6 See Fullan (2006); Senge (2006); Senge et al. (2000).
7 For Vermont's vision, see Vermont Agency of Education, Education Quality and Continuous Improvement Framework: Research, Resources, and Support for Continuous Improvement Planning.
8 Senge (1990), p. 8.
9 Satter, Meisenheimer, McSheehan, & Woods (2018). See Guiding Principles, p. 6.

Figure 2 Analyzing Structural Inequities
Adapted from Everyday Democracy: Understanding Structural Racism activity

A willingness to examine and challenge existing beliefs and attitudes is often a factor in the success of any systemic change. Tony Bryk and his colleagues have studied school change over decades and they point out that, despite its importance, "the need to improve the culture, climate, and interpersonal relationships in schools has received too little attention.[10] A reflective stance might be used, for example, to make decisions about launching an initiative in terms of its compatibility with the espoused values, policies and contexts already in place. Time and time again, innovation and improvement are thwarted – often after a promising beginning – by the lack of sustained attention to the culture of the organization and by the failure to understand that change can only be undertaken and maintained when the system supports the efforts.

Self-reflection sets the stage for building a culture of systemic improvement. Every individual in the system can come to embrace change and innovation as not only necessary, but welcome, because these actions focus on improving outcomes for all students, stimulating engagement for all professionals, and building stronger relationships with families and communities. A growth mindset[11] – a concept revisited later in the *VTmtss Field Guide* – helps create a positive attitude toward the hard work and persistence that is often needed to improve our districts and their schools. Risk-taking and trust are required to take on these challenges. Just as it is important to build resilience in our students, it is necessary to build resilience into the system. Educational organizations and their professionals should celebrate success but should be equally inclined to learn from failure and adapt to change.

10 Kruse, Louis, & Bryk (1994).
11 Dweck (2016).

ESSENTIAL ELEMENTS OF AN EFFECTIVE SYSTEMIC AND COMPREHENSIVE APPROACH

Because organizations have different institutional histories and different mental models, there is no single action or set of actions that will lead to improvement in all settings. As a result, the specifics of how to do this work will vary as a function of size, location, community characteristics and historical development. "Improvement is more a function of learning to do the right things in the settings where you work."[12]

However, research does point to a number of common elements that are characteristic of successful systemic approaches.[13] The characteristics are reflected throughout the *VTmtss Field Guide*, establishing a basis for the VTmtss Framework. These include: (1) the use of data to inform instruction and determine resources, (2) the expertise and capacity to teach for all students, (3) organizational support for Professional Learning Communities (PLCs) and other collaborative arrangements, and (4) a system-wide comprehensive plan and framework for continuous improvement.

Two additional characteristics are especially relevant to the discussion of a Systemic and Comprehensive Approach. They are **vision** and **leadership**. No organization can be truly successful if it does not provide for each of these.

Vision. A clear vision begins with a firm commitment to "the belief that all students can succeed."[14] Additionally, an effective and articulate vision must be embedded in the culture. Creating a vision that is widely shared is both difficult and pivotal to success. Maintaining and sustaining the commitment to this vision is even more important.[15] The Vermont Standards Board addresses these concerns in *A Vision for Teaching, Leading, and Learning*. The first three Core Leadership Standards reinforce the ideas underlying the *VTmtss Field Guide*:

> **Standard 1: Mission, Vision and Core Values**. Effective educational leaders develop, advocate, and enact a shared mission, vision, and core values of high-quality education and academic success and well-being of each student.
>
> **Standard 2: Ethics and Professional Norms**. Effective educational leaders act ethically and according to professional norms to promote each student's well-being.
>
> **Standard 3: Equity and Cultural Responsiveness**. Effective educational leaders strive for equity of educational opportunity and culturally responsive practices to promote each student's academic success and well-being.[16]

The research is clear: schools with a strong purpose based on shared values are more likely to be effective at improving outcomes for students.[17] Although most experts suggest having a written vision statement, it is not necessary to *start* by writing one. In some cases, vision may emerge from the hard work done to establish a community and culture. Developing a commitment to a common set of goals is essential and typically requires leadership.

12 Elmore (2004), p. 73.
13 Fullan (2006).
14 Elmore (2004), p. 73
15 Lipson et al. (2004).
16 Vermont Agency of Education (2018), p. 24.
17 Bamburg (1994), p. 14.

Leadership. Leadership is essential but it is not always attached to a specific role. Although administrators are critically important, a systemic approach, by definition, involves many intersecting parts and people. Changing or improving only the administrative personnel or administrative structures may leave many components of the system untouched – and, typically, unchanged. A systemic and comprehensive approach requires a view of leadership in which the responsibility for improving outcomes for all students is the responsibility of every person in the system.

Principle 3
Effective and committed leadership at all levels of the system is crucial for guiding and sustaining educational excellence and equity.

> Great leadership is at the heart of every high-quality [institution]. Within schools, leadership is most effective when it's distributed among a team of individuals with different skillsets and experiences but a shared mission to spark and sustain a school-wide culture of learning and improved outcomes for students.[18]

Results from a diverse range of studies suggest that effective leadership, especially distributed leadership, is organized to:

- sustain focus over time, building on existing strengths and examining areas for growth;
- attend to practical matters that create greater learning opportunities – particularly school climate and scheduling;
- engage in careful assessment and allocation of resources – people, time, and materials;
- articulate and align curriculum, instruction, and assessment; and
- create partnerships that promote participation on the part of a wide array of people and groups outside of the schools—including families and communities.[19]

Some aspects of administrative leadership are important at all grade levels.[20] However, it is important to note that there are differences in leadership impact at the elementary and high school levels, particularly in terms of how leaders affect student achievement. Not surprisingly, there is a more direct impact at the elementary level than at the high school level.[21] In high schools, leadership's influence may be mediated by other systemic structures, especially the extent to which a culture of continuous improvement has been developed and sustained.

THE SIGNIFICANCE OF A SYSTEMIC AND COMPREHENSIVE APPROACH FOR VTMTSS

A systemic and comprehensive approach is likely to enhance outcomes for any school or district.[22] But, within the framework of VTmtss, it is essential. Teachers, administrators, support personnel and families within a district or school have a shared responsibility to think about the various components and about their role in each. In a multi-tiered system of supports, the following are exceedingly important actions associated with each component. Ideally, district leadership will share these as an organizer for action planning and reflection.

18 Smith, Mihalakis, & Slamp (2017), para. 1.
19 Lipson et al. (2004); Louis, Dretzke, & Wahlstrom (2010); National Association of Secondary Principals and National Association of Elementary Principals (2013).
20 See Practical Matters and VTmtss In Action for further discussion.
21 Louis, Leithwood, Wahlstrom, Anderson et al. (2010).
22 See Darling-Hammond et al. (2013); National Research Council (2014).

Systemic and Comprehensive Approach

- Ensure that the institutional culture of improvement is focused and sustainable.
- Ensure that issues of equity are addressed at every level of the system.
- Develop and sustain a common vision and framework within which to work and communicate, including a shared basic understanding of VTmtss and its processes.
- Provide appropriate organizational supports to ensure effective instruction and intervention that focus on prevention and reduce unnecessary student failure.
- Reflect on the mental models held by individuals and the implied beliefs characterized by structures and modes of operating across the system.
- Measure and monitor the effectiveness and integrity of the multi-tiered system (separate from the assessments of student outcomes – although, of course, that data might be used to assess the efficacy of the system).

Collaboration

- Create deliberate, intentional, ongoing collaborations to improve outcomes for all students.
- Collaborate to represent a range of perspectives in high stakes decisions for students – including specific and meaningful collaboration with students and family members.

High-Quality Instruction and Intervention

- Develop coherent, consistent curricula – academic, behavioral and social-emotional learning – and corresponding practices that guide instruction and intervention to improve outcomes for all students, especially those who have been historically marginalized or under-performing.
- Develop and sustain culturally responsive instructional practices that increase equity and access.

Comprehensive and Balanced Assessment

- Develop and support a comprehensive, balanced, and coordinated assessment system that facilitates appropriate decision-making and provides information that can be communicated to parents and students about students' proficiency, behavior and social-emotional well-being.

Expertise

- Ensure the judicious development and use of expertise and, where needed, locate and employ the necessary resources to ensure that all students make progress within the universal education environment.

Each of the components is intimately linked to the success of a systemic approach. The *VTmtss Field Guide* cycles back on the systemic approach in the final section, "VTmtss in Action."

PRACTICAL MATTERS

Because of the systemic and comprehensive nature of this work there are many activities and tasks that require the attention of individuals with different roles and responsibilities. The complexity of the work also means that different individuals will encounter different practical matters. In this section, the focus is on systems issues. Digging Deeper also provides links to additional resources.

Initiative Fatigue and Alignment of Efforts

Taking on new approaches and launching new programs or practices can be invigorating and exciting. However, it can also result in feelings of uncertainty. Some professionals feel that they are hopping from one "good idea" to another without enough time to consolidate earlier efforts. This concern is made more challenging when various improvement efforts seem disconnected from each other and a larger vision.

Significant improvement requires districts and their schools to address more than one aspect of the system at a time. In a system, a change in one area typically impacts other people or activities. That is the reason why the VTmtss Framework is represented by intersecting and interconnected components.

Principle 8
The foundation for effective problem-solving and instructional decision-making is a dynamic, positive and productive **collaboration** among students, families and professionals.

In order for change to be manageable, it is critically important that districts and schools take stock of existing initiatives and evaluate how each one relates not only to the others but also to the district's vision. Among the questions that may be raised are the following:

1) What are our schools' strengths and weaknesses?
2) What is our vision and what are our core values for a better school?
3) What are our priorities and strategies for change?
4) What structures do we need to reach our goals?
5) What new skills and resources will we need?[23]

As the district and its schools take stock, it will be essential to examine the alignment among various existing or anticipated efforts. Among the resources that may be helpful is the *Technical Guide for Alignment of Initiatives, Programs and Practices in School Districts*.[24] Careful consideration and alignment of goals and anticipated outcomes for various initiatives can increase the impact of any one of them.[25]

The Systemic and Comprehensive Approach Reflection Tool available in 2020, is designed to help districts and schools identify key actions for successful adoption of the VTmtss Framework and also to consider the implications for systemic action. This latter point is an important one since it is entirely likely that professionals will take on new or altered roles within VTmtss. The purpose of this checklist is two-fold: (1) to prompt educators to thoughtfully create or refine their plan for aligning people with responsibilities in a way that respects their unique culture, resources and circumstances within a collaborative systemic approach and (2) to begin to collect evidence and input that can be used to complete the VTmtss Self Assessment.

23 Wagner (1993), para. 14.
24 OSEP Technical Assistance Center on Positive Behavior Interventions and Support (2017).
25 See VTmtss In Action for examples of work done in Vermont schools.

Infrastructure, Scheduling, and Time

District and school personnel, as well as allied professionals, are essential to this work but so are families and communities. There is a critical need to effectively engage the expertise of all relevant school personnel and family members in an inquiry process to interpret data and plan action steps that can improve outcomes for all students.

The **system** has to support the work. It cannot be the case, for example, that teachers are asked to make some curricular change, but there is no time to learn how to do this. Similarly, it cannot be the case that staff are expected to collaborate but have no protected time to meet. The infrastructure mechanisms must support new policy directions as they are translated into appropriate daily operations.

One of the most challenging issues for any organizational system is how to find time to engage in the discussion, decision-making and work required to improve outcomes for students, families and the community.

> Even with help, change comes slowly. In my experience, the scarcest resource in the change process – even more than money – is time. Time for teachers to discuss students' needs, observe one another's classes, assess their work, design new curriculums, visit other schools, and attend workshops. Time for teachers and students to get to know one another. Time for parents and community members to become involved in children's learning. Time for leaders at all levels to reflect and plan collaboratively. Time – perhaps five years – to rethink the purposes of education, reinvent teaching and learning, and create new school cultures.
>
> Can educators make the case in their communities for taking the time needed to do it right? Perhaps – but only by creating inclusive, thoughtful, compelling conversations about purposes and other critical questions. And then by acting with urgency, discipline, and courage.[26]

There are a number of suggestions for how to organize thinking and planning about this critical issue in Digging Deeper.

26 Wagner (1993), para. 44-45.

Component 2: Effective Collaboration

The promise of the VTmtss Framework depends on people – knowledgeable professionals, staff, families, students and community members – who bring the power of their collective expertise to bear on solving problems. Through a systemic and comprehensive approach, diverse stakeholders collaborate purposefully and effectively to ensure equity and to improve academic, behavioral and social-emotional outcomes for all students.

Collaboration is not new to Vermont educators, who have been involved for years in Professional Learning Communities (PLCs), statewide networks and various school and district-based teams.[1] Nationally, most educators assert that collaboration is expected in their contexts, that it is important for student success, and that they collaborate about their work frequently.[2] Despite this widespread acknowledgement of its importance, what is understood by collaboration varies.

WHAT IS EFFECTIVE COLLABORATION?

In the first *Field Guide*, collaboration is defined as "the systematic process of working interdependently in an atmosphere of trust to accomplish collective commitments."[3] This succinct definition points to essential elements that underpin effective collaboration in diverse settings:

1 See Digging Deeper for links to guiding documents used in Vermont's schools that substantiate the important role of collaboration within our systems.
2 Johnston & Tsai (2018).
3 Vermont Reads Institute at UVM (2014), p. 43.

Systematic process. People who are working collaboratively develop common language, foundational understandings and expedient processes for their work.[4] They discuss key ideas; determine roles and responsibilities; and establish guidelines, procedures and protocols for making decisions, reviewing progress, and communicating with each other and across the organization.[5]

Interdependent work. Participants believe that each person can make a meaningful contribution and that they *need* each member's contributions to be successful. They support each other. They share resources, as well as responsibility and accountability for outcomes.[6]

Collective commitments. Collaboration begins when at least two people recognize a worthy situation and commit their collective knowledge and skills to achieve shared goals. They believe strongly in the value of the task and take action to garner the expertise and resources to accomplish it.[7]

Atmosphere of trust. Without relational trust, collaboration will fail – no matter how interdependent and committed the participants or how worthy the cause.[8] When it works effectively, collaboration is powerful because it brings varied perspectives to bear on solving challenging problems. These varied perspectives often involve divergent and strongly held opinions. Working through conflict that naturally arises from problem-solving generally leads to better decisions and joint ownership of outcomes. An atmosphere of trust supports the feeling of safety needed to hold complex, challenging and honest discussions. It is the critical foundation for a culture of collaboration.

A CULTURE OF COLLABORATION

All organizations have cultures – based on beliefs, values, assumptions and expectations that guide the way they operate. These may be explicit and widely accepted, or they may be ambiguous and not held by all. Either way, they affect the tone and effectiveness of the organization, which can be evident from even a brief walk through a school. Do you see special educators and interventionists co-teaching with classroom teachers? Are grade-level or content area colleagues studying and discussing student work? Perhaps a team of administrators, teachers and others are huddled around student assessment data in the guidance office. Are parents and community members also engaged in this activity? Is there a schedule of PLC meeting times on the staff bulletin board? Are classrooms organized so that learners can work easily together and share ideas?

Yet, a school's culture reaches further than meets the eye; it permeates the system. In most schools, good things happen each day and people are congenial and cooperative as they work. While those qualities do exist within a culture of collaboration, they are not its distinguishing factors. In fact, surface cooperation and congeniality may create challenges for effective collaboration.[9] An important distinguishing factor for collaborative cultures is genuine mutual respect for each other's knowledge and skills. Mutual respect and relational trust allow substantive conversations that can get to the heart of important issues and enable good decisions – the goal of effective collaboration.

Thriving collaborative cultures depend on skilled, committed leadership. Leaders initiate positive change and continuously foster the development of relational trust and shared commitment toward a vision for the system.[10]

4 Ehren, Laster, & Watts-Taffe (2009).
5 Dufour, Dufour, Eaker, Many, & Mattos (2016).
6 Slater (2004).
7 Fullan (2010).
8 Bryk (2010).
9 Hargreaves (1994).
10 Valentine (2006); Waldron & McLeskey (2010).

How leaders approach this matters. Those who convey *moral purpose* – a belief that collective actions can make a positive difference in the lives of people – are more likely to inspire collaboration most effectually.[11] If school and district leaders, for example, believe strongly that students, parents and communities have an inherent right to be involved in important decisions and they value the expertise and resources these stakeholders bring to the goal of improving equity and outcomes for students, their actions may inspire a strong systemic commitment to effective collaboration.

Principle 3
Effective and committed leadership at all levels of the system is crucial for guiding and sustaining educational excellence and equity.

ESSENTIAL ELEMENTS OF EFFECTIVE COLLABORATION IN SCHOOLS

The defining elements of collaboration – effective systemic processes, collective commitments, interdependence, relational trust and mutual respect – underpin collaboration in general settings. Table 1 expands and applies these essential elements to school contexts, in which effective collaboration is vital for a systemic and comprehensive approach.

Table 1 Essential Elements of Effective Collaboration in Context

ESSENTIAL ELEMENT	COMMENTARY
Growth Mindset[12]	People believe that abilities can be developed and meaningful tasks accomplished with excellence through collective and focused work. Teams work throughout the system to overcome inequitable distribution of human and material resources, especially as it pertain to historically marginalized students and their needs.
Distributed Leadership[13]	Collaboration thrives when the administration shares leadership responsibilities and empowers others to participate in decision-making about substantive issues. Varied teams meet regularly.
Purposeful Collaborative Arrangements[14]	Teams and partnerships are purposefully formed as part of a system to best meet the needs of each student. They function with mutually established and clearly defined norms and processes for productively addressing issues that arise and communicating across the system.
Students, Families and Communities as Partners[15]	Families and community members are welcomed into the school environment, where their home cultures and languages are respected. Every student and family is an authentic partner within the system and has opportunities to shape school experiences, receive accurate and meaningful information about student progress, and hold legitimate roles in decision-making.
Targeted Expertise[16]	Because people are working together, expertise can be targeted to support students more efficiently. Teams collaborate to best distribute expertise so that all students get what they need when they need it.
Student-centered Personalized Learning[17]	Students are collaborators in discussion, creation, and decision-making about their learning. With assistance from adults, students create customized learning plans based on the student's strengths, needs, skills, interests and how they learn best.
Collaborative Learning[18]	Classroom lessons and other learning opportunities are structured so that learners work together to discuss ideas, build community and solve problems.

11 Fullan (2004).
12 Dweck (2017).
13 Burns & Darling-Hammond (2014); Waldron & McLeskey (2010); Smith, Mihalakis, & Slamp (2018).
14 Kemp & Poole (2018); Marzano, Heflebower, Hoegh, Warrick, & Grift (2016); Sparks (2013).
15 Epstein (2018).
16 Ehren et al. (2009); Vermont Agency of Education (2018); Woods, Satter, Meisenheimer, & McSheehan (2018).
17 Vermont Agency of Education (n.d.); Cavanagh (2014).
18 Hess (2019); SWIFT Education Center (2016); VanAusdal (2019).

How and to what extent school systems establish and exhibit these elements and sustain collaborative cultures varies, depending on the commitment of the people and the unique features of their context. The importance of effective collaboration in schools is, however, unarguable. Studies of Vermont schools that were especially successful at improving student achievement identified factors that support success, regardless of school size. Their findings highlight the significance of staff collaboration[19] and the importance of using purposeful collaborative arrangements, appropriate to the particular school context.[20]

National research consistently affirms the benefits of effective collaboration for both students and teachers.[21] Schools that have effective collaborative cultures produce students with higher achievement and better levels of skills and understanding than traditionally organized schools.[22] All students' academic achievement improves when educators collaborate about curriculum, instruction and professional learning – especially when they use purposeful information from varied assessments to make decisions.[23] Teachers who collaborate to plan instruction and participate in peer observation and feedback enjoy expanded resources, improved student achievement and greater professional satisfaction.[24] School-wide efforts to address students' behavioral and social-emotional learning lead to a reduction in inappropriate behavior, an increase in positive interactions between teachers and students, and improved student learning.[25]

Decades of research studies emphasize that strong partnerships between families, schools and communities improve outcomes for students.[26] In addition, because students are the prime stakeholders in a multi-tiered system, schools with collaborative cultures value students' voices and insights. They include students in decisions about their own goals and systems-level decisions. Ultimately, when students, parents, teachers and communities collaborate effectively as partners for education, a caring community can form to support all students' academic, behavioral and social-emotional learning. And that is the essence of collaboration for VTmtss.

SIGNIFICANCE OF EFFECTIVE COLLABORATION FOR VTMTSS

The enduring systemic work for VTmtss requires sustained and effective collaboration across settings and programs, among diverse stakeholders, and beyond the school system. It begins when district leaders engage members of the school community in a collaborative process of examining their fundamental beliefs about teaching and learning for all students, especially those who struggle and are at risk of failure. Values, beliefs, norms and preferred behaviors emerge, focused on the goal of equity and improved academic, behavioral and social-emotional learning for all students.

Current research conducted in Vermont schools reveals that a paradigm shift is emerging as people collaborate. Some districts and schools are reframing the traditional delivery roles through which special educators, grade-level educators, specialists and paraprofessionals meet the needs of students with intensive needs or low incidence disabilities. These studies assert that collaboration between general and special education teachers can improve teacher instructional practices, increase engagement of students with special needs in the life of the classroom, and bolster the academic, behavioral and social-emotional learning of all students.[27] The authors label this fluid framework for special education Inclusive MTSS. "Simply put, Inclusive MTSS re-conceptualizes

19 Lipson, Mosenthal, Mekkelsen, & Russ (2004); Vermont Department of Education (2009).
20 Lipson et al. (2004).
21 Ronfeldt, Farmer, McQueen, & Grissom (2015).
22 Burns & Darling-Hammond (2014); Darling-Hammond (1997).
23 Johnston & Tsai (2018); Mattatall & Power (2015); Ronfeldt et al. (2015).
24 Reeves, Pun, & Chung (2016).
25 Chaparro, Smolkowski, Baker, Hanson, & Ryan-Jackson (2012).
26 Epstein (2018); Epstein & Salinas (2004).
27 Satter, Meisenheimer, McSheehan, & Woods (2018); Woods, Satter, Meisenheimer, & McSheehan (2018) .

education as a system for equitably distributing supports and services based on student needs."[28] Within this model, roles and responsibilities of varied specialists shift to leverage the joint expertise each brings to students' learning. They recommend that, "Vermont schools reframe *all* staff roles to better support students with significant or low-incidence disabilities and their classmates in an MTSS framework."[29] This new service delivery model depends on collaboration that results in matching student needs with educator expertise, often reframing traditional roles.

Reframing roles is not without challenges. Classroom teachers who have worked in isolation for several years may feel that what they do is working just fine and may not seek collaborative opportunities. Special educators and specialists who typically work independently with subsets of children on specific skills may view those children as their only charge. Likewise classroom teachers may perceive that a specialist or paraeducator's work lessens their responsibility for some students or that they are not prepared to work with students with intensive needs. Or perhaps they have experienced ineffective collaborative teams where the process was cumbersome or work not shared. The authors recommend that an Inclusive MTSS approach is a worthy goal.

Promising practices underway in VTmtss schools include:

- adopting models that encourage collaborative instructional arrangements such as co-teaching and peer coaching;
- redesigning the roles of paraprofessionals to emphasize non-instructional or supplemental responsibilities that support teacher-designed instruction;
- reconfiguring schedules to provide joint planning time, as well as embedded and joint professional learning; and
- networking with professionals and agencies who can provide resources for students' needs.[30]

While such structural changes in themselves are seldom enough to yield meaningful results, they show promise when they occur within a broader contextual framework for continuous improvement.

For districts and schools to meet the academic, behavioral and social-emotional needs of all students, effective collaboration is not optional; it is essential. By working together within a VTmtss Framework, we will learn from each other and can accomplish much more for students than would be possible in isolation. Positive outcomes from effective collaboration far exceed the sum of the parts.

Principle 8
The foundation for effective problem-solving and instructional decision-making is a dynamic, positive and productive collaboration among students, families and professionals.

PRACTICAL MATTERS

Districts and schools often encounter many practical matters as they cultivate a collaborative culture and apply practices that support effective collaboration for VTmtss. In this section, we address four: Getting Started, Time for Collaboration, Professional Learning to Supports Effective Collaboration Skills, and Establishing and Maintaining Collaborative Partnerships with Families and Community. Digging Deeper provides links to useful resources.

28 Satter et al. (2018), p. 2.
29 Satter et al. (2018), p. 3.
30 Giangreco (2010); Giangreco, Broer, & Suter (2011); Giangreco & Suter (2015); Satter et al. (2018); Woods et al. (2018).

Making the Most of Collaboration: Getting Started

In Vermont schools, people are already looking at student success and collaborating at some level. The first step leaders can take toward improving collaboration is to understand the impetus of collaboration within the state context. Digging Deeper provides links to guiding documents used in Vermont's schools that substantiate the important role of collaboration within our systems. With this knowledge base, districts and schools can examine their current collaborative arrangements and practices for potency and efficacy and think about what collaborative structures and practices can best support a VTmtss Framework in the particular context.

A sustainable multi-tiered system calls for a culture in which *everybody* collaborates through intentional collaborative arrangements – usually a variety of purposeful and connected teams.[31] Within these, teachers, students, administrators, specialists, families and community providers decide how resources will be leveraged for maximum impact on student outcomes. Essentially, a relevant mix of participants:

- analyzes and discusses a variety of purposeful data at the school, grade, classroom and individual student levels;
- collaborates about why, what and how to teach so that student outcomes improve;
- decides how students' progress will be assessed and monitored; and
- determines how members of the team and other experts will intervene when students are not meeting benchmarks or are exceeding benchmarks and need additional challenges.

To support this work, leaders create a system of purposeful collaborative arrangements, or teams, tailored for their settings.

Two teams are essential in all VTmtss contexts: an Educational Support Team (EST) and a Leadership Team. ESTs are required by Vermont education law as part of a tiered system of supports.[32] They use data as the basis for supporting individual students and ensuring equity. In addition, they promote collaboration in the school community, effective instruction and intervention practices, and alignment with resources and professional learning. A Leadership Team is critical at the district or school level to launch and sustain the multi-tiered system. They begin the reflective work described in "A Systemic and Comprehensive Approach" (Component 1) of this guide and use the VTmtss Self Assessment to identify the next steps for its district or school. Part of this reflective work is to assess the effectiveness of existing collaborative arrangements and the capacity and expertise of staff in order to create collaborative teams most beneficial for the needs of the system and students.

Appendix A presents a categorized list of various collaborative arrangements that often exist within VTmtss schools, each one's typical membership, purpose and activities. These are not intended to be prescriptive nor limited in scope and will vary as schools adapt and develop creative solutions to suit their unique sizes, particular strengths and student needs. Teams will assume varied names, and some small schools may form hybrid teams that assume more than one purpose. Determining team membership requires careful understanding of the team's purpose, an inclusive and fluid approach, and assurance that good decision-makers, appropriate experts and stakeholders are at the table. Appendix A can assist districts and schools as they consider the collaborative arrangements needed to support successful VTmtss in context.

31 Kemp & Poole (2018); Marzano, Heflebower, Hoegh, Warrick, & Grift (2016); Knackendoffel, Dettmer, & Thurston (2018).
32 Vermont Agency of Education (2018).

Time for Collaboration

> "Lack of scheduled time is the most commonly reported barrier to professional learning, and lack of time for collaboration impedes teachers from joint planning, observing, and receiving feedback from peers – all of which improve instructional practices, enhance self-efficacy and enhance student achievement."
>
> — Dion Burns and Linda Darling-Hammond, *Teaching Around the World: What Can TALIS Tell Us?*

Scheduling time for educators to co-plan high-quality instruction and intervention is addressed in the Practical Matters section of "High-Quality Instruction and Intervention" (Component 3). In addition to instructional co-planning, leaders need to muster the resources required to schedule regular time and appropriate space for collaborative teams to meet. This is critical for accomplishing successful VTmtss, and also for maintaining a collaborative culture. Leaders may unintentionally undermine trust if they give verbal support to collaboration but do not provide the scheduled time and resources for educators, professional partners, families, students and other stakeholders to work together.

Solving the time dilemma does not mean finding new time, but rather using time in new ways to focus on the work at hand. Some schools may work hard to rethink how staff and student groupings allow groups of professionals to collaborate. Importantly, people will often find the time to collaborate if it seems valuable to them.

One of the most critical issues, then, is to ensure that the time scheduled for collaboration is used wisely and results in important insights or actions. Michael Fullan cautions, "Collaborative cultures are indeed powerful, but unless they are focusing on the right things, they may end up being powerfully wrong."[33] While collaborative arrangements and teams need scheduled time to meet, agendas must also be purposeful and meetings monitored for effective results. Collaborative time must be spent well.

Resources provided in Digging Deeper address issues and provide suggestions about scheduling time for effective collaboration.

Professional Learning to Support Effective Collaboration Skills

In order for collaborative time to be spent well, teams often need coaching and training to work together effectively and to develop culturally competent ways of collaborating and communicating. Educators and other stakeholders who are members of collaborative teams can benefit from professional learning to refine skills in communicating, problem-solving, exchanging information and sharing diverse perspectives and expertise.

Teams learn effective meeting procedures and how to apply useful protocols that strengthen their capacity to work together efficiently, productively and respectfully. Take stock, first, of the strengths and particular needs for professional learning in this area. Digging Deeper offers links to a wealth of information and resources.

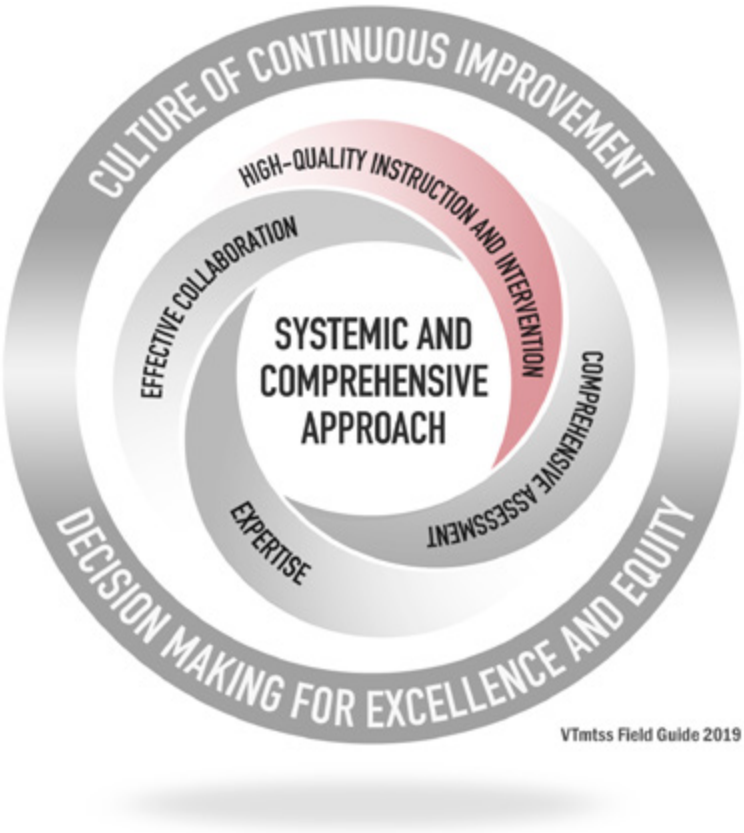
33 Fullan (2010), p. 10.

Establishing and Maintaining Collaborative Partnerships with Families and Community

The importance of including students, families and community members as active partners in achieving success for all students is intentionally highlighted within each component of this guide. Districts and schools invite families to collaborate because they can provide unique expertise about their children's learning and contribute important perspectives to school-level decisions. Community partnerships open the door for access to expertise and more comprehensive supports for students and families. Building cultural bridges and respectful relationships with family and community partners is a vital ingredient for achieving equity and improving outcomes for all students.

Schools can augment their work by creating partnerships with agencies and community members who can support students, and sometimes families. Community service providers, medical and mental health support agencies, post-secondary institutions, professional organizations and businesses are often eager to offer specific support or resources. Many excellent vetted resources are available through the VT AOE. The possibilities for partnerships to support the goals of a multi-tiered system are limited only by imagination or convention.

See Digging Deeper for links to resources that can support districts and schools in developing and maintaining these partnerships.



Component 3: High-Quality Instruction and Intervention

The VTmtss Framework is designed to ensure that all students experience high-quality teaching and related supports so that every learner can achieve excellent outcomes.[1] The VTmtss Framework promotes the view that no single component can accomplish this end. Instruction and intervention can only be effective when there is a continuous improvement process for developing and sustaining a comprehensive system that cultivates expertise, promotes collaboration and uses high-quality assessment data effectively to make good decisions.

WHAT IS HIGH-QUALITY INSTRUCTION AND INTERVENTION?

Research is clear that the quality of universal classroom instruction is critical to students' long-range achievement.[2] Students who receive multiple years of high-quality instruction are much more likely to succeed than those who do not.[3] Furthermore, the impact of *ineffective* teaching is cumulative and continues to affect students even after they have moved on to more effective experiences.[4] The VTmtss Framework is intended to *prevent* difficulties wherever possible and, when needed, *provide support and intervention* to ensure that every student is successful.

1 Vermont State Board of Education (2014).
2 Rand Corporation (2012).
3 Snow, Barnes, Chandler, Goodman, & Hemphill (1991); Rivkin, Hanushek, & Kain (2005); Sanders & Rivers (1996).
4 See Bembry, Jordan, Gomez, Anderson, & Mendro (1998); Jordan, Mendro, & Weerasinghe (1997).

As educators we are responsible for actively seeking to understand the diverse needs of our students, especially those that are historically marginalized. No change between the first *Field Guide* and this edition is more significant than this edition's much greater focus on action, throughout the educational cascade.

A CULTURE OF INSTRUCTIONAL EXCELLENCE AND ENGAGEMENT

A contemporary vision of excellence and engagement requires educators to engage students and create a school culture that builds confidence, competence, self-regulation and motivation for *all* students and their communities.[5] To achieve this vision, all stakeholders may need to examine their own beliefs and assumptions. Is our school community committed to the belief that all students can succeed? Do we fully consider what it will take for students to work toward challenging goals in personally meaningful ways? And, if so, have we organized our institutions to ensure the accomplishment of such goals?

In successful schools, the answer to these questions is "yes." Effective action relies on the **commitment** (at the school and district level) to expect all students to succeed and to plan for improvement, while remaining flexible enough to adapt as circumstances change. Both teacher expertise and strong leadership are required. These characteristics are hallmarks of successful schools – in Vermont and elsewhere.[6]

Principle 1
Success begins with committed educators who believe that all students learn and can achieve high standards as a result of effective teaching.

Even expert educators cannot teach well if conditions do not support excellence.[7] For example, successful schools (vs unsuccessful schools) provide more *opportunity* for teaching and learning.[8] What this means is that the system creates more time for uninterrupted teaching and learning by controlling systemic factors such as scheduling, announcements and specialized programs. At the same time, teachers themselves provide more opportunity by making nuanced decisions about how they use their time, while still honoring collaborative agreements that the staff have made about content and curriculum.

Of course, strong social-emotional programs produce positive outcomes for students, but they also help teachers capture additional instructional time by limiting the impact of behavioral disruptions, disorderly transitions, etc. Creating opportunity and a positive climate may be facilitated at all levels by using positive behavioral or responsive classroom approaches. In high schools, additional supports are likely to include teachers' assistants and advisory times.

The responsibility to provide high-quality instruction and intervention for all students does not rest on the shoulders of teachers alone. It is critical that professionals at every level take responsibility for creating the conditions for excellence. Setting up for success starts long before individual teachers and students interact. Schedules are established; materials are selected, created or purchased; priorities are set; supports are identified; and much more. Each of these is implicated in determining whether instruction and intervention are high-quality or not.

Similarly, the system – and individuals in it – need to create and sustain both the structural and interpersonal climate to allow for meaningful work. Students, families and communities need to be engaged in the collaborative partnerships necessary to improve outcomes for all students. In addition, all educators need to participate in

5 Comer (2005); Comer & Emmons (2006); Fisher, Frey, Quaglia, Smith, & Lande (2017).
6 Lipson, Mosenthal, Mekkelsen, & Russ (2004); Shannon & Bylsma (2007).
7 See "Expertise" (Component 5), p. 53.
8 Mosenthal, Lipson, Torncello, Russ, & Mekkelsen (2004); U.S. Department of Education, Office of Vocational and Adult Education (2005).

some common professional learning opportunities so that each person in the system can support the common goals and approaches being used. Each district and school should consider how the systems in place support or create barriers for excellent teaching and learning.

It has become clear that this systemic approach to instructional excellence is a multiplier for any individual actions or tactics for change. Recent meta-analyses of hundreds of research studies has led educational researcher John Hattie to conclude that one of the most critical influences on student achievement is "collective teacher efficacy."[9] Collective efficacy results when the entire faculty believes that they can make a positive difference in student outcomes and sets out to do that.

ESSENTIAL ELEMENTS OF HIGH-QUALITY INSTRUCTION AND INTERVENTION

To organize thinking about this complex component, we offer several assumptions that can be taken as givens. In the Practical Matters and Digging Deeper sections for this component you can access more information about specific research-based recommendations for instruction and intervention.

Assumption 1: Excellence Starts with High-quality Universal Instruction for All Students. In the context of a multi-tiered system of supports, some authors refer to excellent universal instruction as the first intervention. Indeed, strong universal instruction focused on standards and proficiencies anticipates variation among students. Layered supports and interventions are also provided within especially effective classrooms—in response to information gleaned from ongoing assessment. These might take many forms, such as small groups focused on specific student needs, quickly planned exchanges between a teacher and student when confusion has been observed, or additional opportunities to extend knowledge and skill when some students are ready for more. What is important about this assumption is that it asserts that all students, including students with a wide range of diverse needs and low-incidence disabilities, will have membership, engagement and participation in the life of the classroom.

Assumption 2: Academics, Behavior and Social-Emotional Well-Being are Intertwined. There is clear evidence that improving students' social and behavioral functioning often improves academic performance and vice versa.[10] Recommendations for improving outcomes for students who are struggling in the area of behavior or social-emotional functioning are, therefore, intertwined with improved instructional contexts. Explicit and responsive teaching of behavioral expectations and a social-emotional curriculum are as important as robust standards and instruction in reading and mathematics and other content domains. Focused work on developing resilient learners helps students maintain and promote both academic and personal growth. A focus on appropriately challenging academic content and also on executive functioning and perseverance are likely to inform and strengthen each other.

Assumption 3: Students are Provided Effective Interventions and Layered Supports. A multi-tiered system of supports depends on excellent classroom instruction, but it also anticipates that some students will struggle – even when provided with good initial instruction.[11] A wide range of layered supports, intentionally planned and closely monitored, is critical to a successful approach to VTmtss.[12]

9 Hattie (2012), (2015).
10 Immordino-Yang, Darling-Hammond, & Krone (2018).
11 National Mathematics Advisory Panel (2008); Vaughn, Wanzek, Murray, & Roberts (2012).
12 See Effective Interventions and Layered Supports in this component.

Although educators may understandably wish that someone would "tell us what to do," the evidence suggests that it just doesn't work that way. Sustained excellence in instruction and intervention only results from deep understanding of effective practices that is coupled with the ability to respond to the needs of specific students and communities.[13] The implications of each of these assumptions, or givens, are described in some detail below.

Universal Instruction

Excellent, relevant research on teaching and learning has burgeoned over the past five decades. Among the most compelling findings is that high-quality instruction can reduce the number of students who experience academic, behavioral, or mental health challenges through intentional, proactive prevention approaches.[14]

Some behaviors, approaches and conditions appear to be important in all circumstances. We have extracted several key attributes that are important for academic, behavioral or social-emotional contexts and are applicable for both younger and older students (see Table 2).

Principle 4
A system supports all students by providing each student with the highest quality classroom instruction – instruction that is informed by research, supported by a standards-based curriculum, and provided by highly-qualified educators.

Table 2 Research-Based and Generalizable Factors in Instructional Excellence at All Grades and for All Students

ESSENTIAL ELEMENT	COMMENTARY
Instruction is Provided by Expert Teachers	Expert teachers create effective classroom environments based on clear understandings about the learner and learning.[15] They access deep knowledge and skill to plan, teach and revise instructional exchanges responsive to the needs of individual learners.
Instruction is Focused on Important and Appropriate Outcomes	Standards-based instruction and intervention – with a focus on *important*, developmentally appropriate and relevant outcomes – articulate the high standards all students are expected to meet.[16]
Instruction is Informed by Research Evidence	Wherever possible, specific instructional strategies and techniques are selected based on their documented effectiveness for specific populations of students, particularly, historically maginalized students, English Language Learners, and those with cultural differences or learning difficulties.[17]
Instruction Promotes Engagement	Engaged students learn more, learn better, have more positive attitudes toward learning, and are more likely to remain in school.[18] Engaging instruction includes increased student choice; activities and approaches that are active, personally relevant and authentic; supportive relationships; and positive school climate.[19]
Instruction is Designed for and Responsive to the Needs of Diverse Students	Instruction and intervention are informed by ongoing, instructionally-relevant assessment and attendance data from student – teacher interactions.[20] Goals are tailored for individual students, include flexible pathways, and are designed to support learning and progress toward proficiency.

13 See "Expertise" (Component 5), p. 53.
14 Dwyer & Van Buren (2010); Fuchs, Fuchs, & Compton (2012); Scanlon, Anderson & Sweeney (2016).
15 Danielson (2009), (2013); Marzano (2007); Vermont Agency of Education (2018).
16 See VT AoE-adopted standards and proficiencies, Vermont Agency of Education, Student Learning: Content Areas; Vermont Agency of Education, Student Learning: Proficiency-based Graduation Requirements. For more information on the Early Literacy Blueprint see the Vermont Agency of Education.
17 Vermont's EQS require that "classroom instruction shall include a range of research-based instructional practices that most effectively improve student learning, as identified by national and Vermont guidance and locally collected and analyzed student data."
18 Headden & McKay (2015); Lei, Cui, & Zhou (2018).
19 Archambault, Janosz, Fallu, & Pagani (2009); Maxwell, Reynolds, Lee, Subasic, & Bromhead et al. (2017).
20 Vermont EQS 2120.4; 16 V.S.A. § 941.

Recent educational research is clear that "best practice" is context-specific; *all* approaches work with *some* students and teachers and *none* work with *everyone*.[21] Excellent universal instruction involves planning for intentional variation in students' knowledge, skill, experience and modes of learning. It is *intentionally designed* so that *all* students can access grade-level content and standards.

In Vermont, we take justifiable pride in our inclusionary practices; practices that extend class membership to all students. However, some students may be members of the class, while having few opportunities to participate or learn within that setting. Universal instruction means *universal*. All students should be included to the maximum extent possible in order to enjoy the benefits of learning from diverse perspectives, peer models and social interactions. Special attention should be given to ensure that all students have membership to participate and learn in meaningful ways within the universal setting for instruction.[22]

Planful Attention to Academic, Behavioral and Social-Emotional Well-Being

> "In addition to producing students who are culturally literate, intellectually reflective, and committed to lifelong learning, high-quality education should teach young people to interact in socially skilled and respectful ways; to practice positive, safe, and healthy behaviors; to contribute ethically and responsibly to their peer group, family, school, and community; and to possess basic competencies, work habits, and values as a foundation for meaningful employment and engaged citizenship."
>
> — M. T. Greenberg, R. P. Weissberg, M. U. O'Briend, J. E. Zins, L. Frericks, H. Resnik and M. J. Elias, "Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning"

American schools of the 21st century have established ambitious and challenging standards for academic performance. At the same time, educators recognize the importance of teaching and supporting positive social behaviors and improving social-emotional well-being – both to facilitate academic outcomes and as valued outcomes in and of themselves.

It is important to emphasize that the factors described in Table 2 are applicable across these domains. A recent meta-analysis of universal approaches to Social-Emotional Learning (SEL) across grades K–12, demonstrates that a small set of practices are equally useful in fostering personal and social responsibility as in promoting academic achievement.[23] Importantly, various distinct innovations have begun to create unifying frameworks to help schools integrate SEL and behavior.[24] Although not all schools and districts have adopted a framework of SEL competencies, it is clear that explicit instruction of proficiencies in this area are likely to have beneficial effects on social and behavioral well-being and lead to more self-directed and independent learning.[25] At the same time, considerable research demonstrates the relationship between positive school and classroom culture and student success in other areas.[26]

Effective Interventions and Layered Supports

The VTmtss Framework explicitly recognizes that both excellent universal instruction and additional layers of support may be necessary for some students. The concept of "tiers" was clarified in the introduction to the

21 Bond & Dykstra (1967/1997); Mathes et al. (2005); Torgeson et al. (2001); Wanzek & Vaughn (2008); Zrebiec, Mastropieri, & Scruggs (2004).
22 Satter, Meisenheimer, McSheehan, & Woods (2018).
23 Durlak, Weissberg, Dymnicki, Taylor, & Schellinger (2011).
24 Barrett, Eber, McIntosh, Perales, & Romer (2018).
25 Patyon et al. (2009).
26 Sugai & Simonsen (2012).

VTmtss Field Guide. In some cases the misapplication of the term "tiers" has led to the labeling of some students as "tier 2" (or 1 or 3). There are no such students, although there may be many who need, and can benefit from, additional layers of support or specific interventions. Similarly, no teacher should be designated as a tier 1, 2 or 3 teacher. High-quality instruction and intervention demands that the appropriate expertise be brought to bear wherever it is needed.

Principle 6
Student proficiency increases when expert professionals **analyze and use ongoing performance data** to inform decisions and provide instruction that is responsive.

The model in Figure 3 highlights the idea that multiple supports may be layered for some students.

What is an Intervention?
"Instruction that supplements and intensifies classroom curriculum/instruction to meet student needs (academic or behavioral)…"

— Danielle Kent, *What is an Intervention? Rhode Island RTI Initiative Module 2*

Although some students will need relatively robust – and lengthier – specific interventions, it acknowledges that many supports are provided right within the context of universal instruction. And still others might involve relatively brief supports in or outside the classroom. Finally, the same student may need, for example, relatively modest group counseling for social-emotional issues while requiring intensive support or interventions in, for example, mathematics or reading. A comprehensive multi-tiered system of supports requires engagement from all professionals.

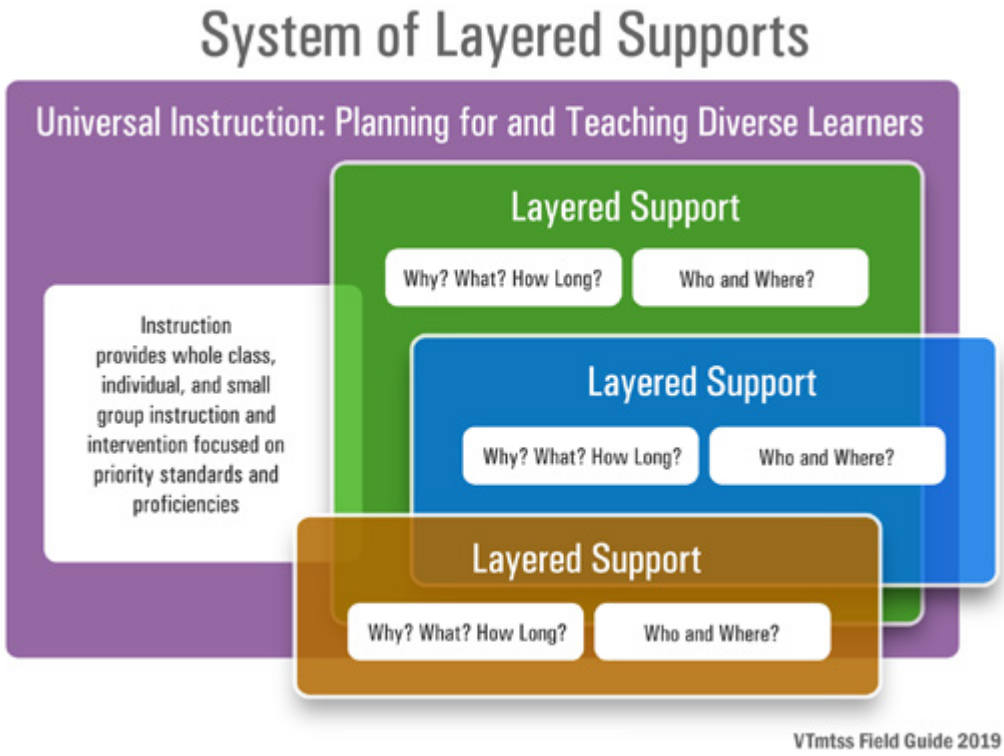


Figure 3 System of Layered Supports

Schools and districts will be more successful if they cultivate a wide range of flexible support options. Among those options are evidence-based interventions that only a few students may need. In these cases it is especially important that *teachers have the appropriate professional expertise* to maintain the integrity of the approach – by providing the support and intervention themselves or by providing professional coaching to classroom teachers.

Simply placing a student in a different context does not assure enhanced expertise. Vermont, like other states, has historically relied too heavily on paraeducators to provide instruction, intervention and support to our most vulnerable students.[27] In enacting Act 173, Vermont has taken significant steps "to enhance the effectiveness, availability and equity of services provided to all students who require additional support in Vermont's schools."[28] The legislation broadens the definitions of individuals who may receive funding support under the Individuals with Disabilities Education Act (IDEA) and also those whose work may provide that support.[29]

These refinements are meant to *extend* supports to all students, as needed. They are *not* meant to restrict access for students who may need the specialized instruction they are entitled to through Special Education. Increased intensity can mean more expert support from a specially-trained professional, smaller groups, additional instruction (not just more time), and tailored techniques or approaches.

ESSENTIAL ELEMENTS OF SUPPORT AND INTERVENTION

Principle 7
Instruction and intervention are culturally sensitive, based on solid research, and allow teachers to use formative assessment and keen observation to engage in responsive teaching.

The purpose of intervention is to accelerate and enhance learning. As we have indicated elsewhere, the *VTmtss Field Guide* does not recommend specific programs, activities or materials.

Excellent layered support typically involves intentionally adjusting good universal instruction. This might entail increasing the length or duration of instruction, reducing the group size for instruction, changing materials, or altering instructional focus. It always involves skillful teaching that responds to specific students and contexts.[30] While educators should carefully identify and honor the integrity of various approaches, it is often necessary to also tailor specific materials, tasks or pacing to the assessed needs of individual students. Importantly, interventions that work with younger students may not be appropriate or effective at all for older ones.[31] For students who require more substantial support, extra care needs to be taken. Educators have a professional responsibility to use techniques, strategies and approaches that we have reason to believe will effectively address the needs of specific students.

Evidence-based. Even though people may disagree about what counts as evidence, there should be no debate about our obligation to offer the very best instruction and support possible. It is important to consider the empirical evidence of the efficacy of specific interventions.[32] However, there are many instructional "moves" that are not amenable to testing in controlled settings. In addition, there are hardly any empirical studies that have unpacked the effects of specific interventions on varied student populations.

A recent definition by experts in this area offers a productive framework for making decisions and thinking about evidence-based education, "Evidence-based practice in education [is] a decision-making process that integrates

27 District Management Group (2017).
28 Bouchy, Fowler, & Byrne (2018), p. 1.
29 See "Expertise" (Component 5) for a more extended discussion of expertise, including a recommendation for surveying district-wide expertise.
30 Cohen, Raudenbush, & Ball (2003).
31 Edmonds et al. (2009).
32 See Digging Deeper, p. 106.

(1) the best available evidence, (2) professional judgment and (3) client values and context."[33] Professionals in other domains have adopted this approach to evaluating the evidence base for specific practices.[34]

This definition should not be taken to mean that there are no standards for selecting or creating effective supports and interventions. Any number of syntheses of studies now exist.[35] The specific attributes of interventions focused on different domains vary but there are some features that are common to all effective interventions (see Table 3).

Table 3 Attributes Common to Effective Supports and Interventions

ESSENTIAL ELEMENT	COMMENTARY
Evidence-based	Available information is examined to evaluate educational benefits for students generally and also to identify which students benefited and which did not (using age, demographic data, skill level, etc.).
Tailored to specific student needs	Multiple sources of assessment data are used to identify, select, plan or create interventions. Interventions focus on both near- and long-term goals. Supports reflect and inform personalized plans, flexible pathways and Individualized Education Programs (IEPs).
Progress monitoring and other high-quality assessment information inform decisions	Progress is carefully monitored to determine whether and when the supports and interventions should be altered. Over time, data are used to make decisions about specialized programs and approaches.[36]
Program integrity is balanced with responsiveness to students' unique background, experience, and progress	Attention to "fidelity" in program or practice does not inhibit responsive instruction, ongoing decision-making and differentiation which may be needed to account for student variability. Any changes or decisions about intervention are carefully documented and their impact monitored.
Supplements universal instruction	Intervention does not supplant nor limit students' access to universal instruction. Classroom instruction is the main instructional program for all students, who participate fully and meaningfully as a member of the classroom.
Provided by the most expert professionals available	Learners who require support or intervention receive all instruction from highly-skilled teachers. Universal instruction is supplemented using the general principle: as students require more support and intervention, the student-teacher ratio decreases and the expertise of the teacher increases.

Focused on Progress toward Proficiency for Individual Students. Vermont schools have made progress in establishing benchmarks and learning targets. These periodic indicators of expected achievements help students, families and educators to set goals and regulate learning. For students who are struggling, however, more information is usually needed. In order to provide key instructional opportunities, educators cannot focus only on the target knowledge, skill or behavior. It is usually necessary to identify the precursor knowledge and skills that will propel students toward proficiency. For students who do not meet the learning target, it is important to specify

33 Spencer, Detrich, & Slocum (2012), p. 129.
34 Whitehurst (2002).
35 Diamond, Justice, Siegler, & Snyder (2013); Durlak et al. (2011); Edmonds et al. (2009); Fuchs et al. (2012).
36 See "Comprehensive and Balanced Assessment System" (Component 4) and examples in "VTmtss in Action" for further information.

the knowledge and skills "in the space between" levels of proficiency (see Figure 4). The detail of this knowledge, content or skill is often called a Learning Progression (LP).[37]

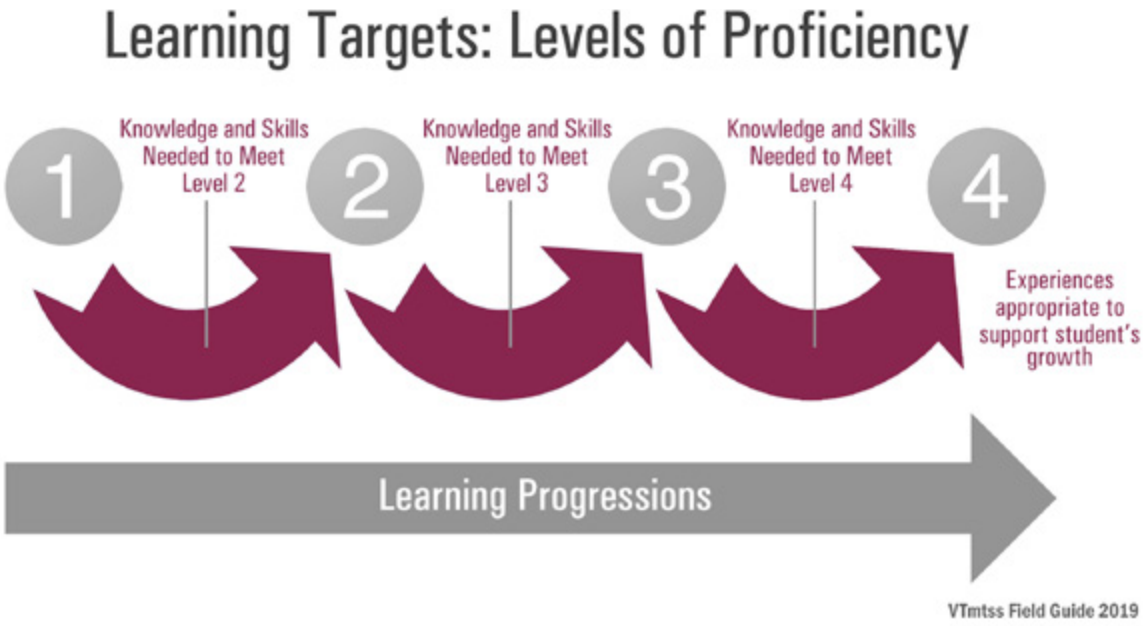


Figure 4 Planning Instructional Content that Leads to Proficiency

It is important to emphasize the instructional nature of this progression. The content and skills in *each progressive area* are the near-term focus for both teachers and students. Clear articulation increases the likelihood that students will make progress. When these LPs cover a smaller skill, educators Kate Roberts and Maggie Roberts call them **micro-progressions**.[38]

Personalized and Tailored. Personalized learning depends on these types of progressions and micro-progressions.[39] While all students benefit from careful consideration of the knowledge and skills they need to acquire in order to improve their proficiency, tailored instruction and intervention are essential for students with disabilities. For students who are not yet meeting a proficiency target, support and intervention must be designed or selected to address the content and abilities required to move to the next level of proficiency.

When teachers and students identify where students are in a progression, they are in a position to provide instruction and intervention that is focused exactly where it needs to be in order to move as quickly as possible toward age or grade-level proficiency targets. Among the most useful tools for enacting this work is the **Common Core Essential Elements (CCEE).** These are aligned with the *grade-level* general education curriculum for all students and identify various access points. The *Standards Continuum for CCEE* provides further guidance by creating diverse linkage levels so that teachers can plan and teach the same standard for students of differing levels of proficiency.[40] "VTmtss in Action" contains an example of how this practice supports intervention at the high school level.

37 National Research Council, Committee on the Foundations of Assessment (2001); Popham (2007), p. 83.
38 Roberts & Roberts (2016).
39 See Yettick (2015).
40 For more information see The Vermont Agency of Education.

SIGNIFICANCE OF HIGH-QUALITY INSTRUCTION AND INTERVENTION FOR VTMTSS

The importance of high-quality instruction for all students in every setting is a matter of equity.[41] Within the VTmtss Framework, specific aspects of effective instruction and intervention are especially important because the system must support decision-making. For example, when students are struggling, or are likely to struggle, without support. The instruction and intervention component of a successful multi-tiered system of supports emphasizes two purposes:

- **Ensure access and equity for all students**. All students participate in high-quality learning opportunities that are accessible, equitable, evidence-based and engaging. And "every student has access to the educational resources and rigor they need at the right moment in their education across race, gender, ethnicity, language, sexual orientation, family background, and/or family income."[42]
- **Provide Layered Supports**. Students receive the supports and interventions they need to be successful. Instruction and intervention are increasingly differentiated, tailored and targeted in a tiered system designed to accelerate learning. A layered approach to a multi-tiered system of supports anticipates that multiple supports may be provided simultaneously and flexibly.

To serve these two purposes, the following systemic features are required in VTmtss:

- **Alignment and coordination of instruction across settings**. Students' instruction and intervention – across settings and over time – is coherent, interrelated, and designed to ensure comprehensive and balanced achievement and performance. The strategies and approaches used by a district or school ensure high-quality, evidence-based and standards-driven instruction in *every classroom* and in *all settings*.
- **Responsive decision-making**. Teachers and other professionals take responsibility for engaging in ongoing assessment in order to make instructional decisions that consider the child's developmental level and learning needs in order to maximize learning. All instruction and intervention programs, approaches and supports respond to a student need and ensure equity of opportunity and outcome.

Research evidence suggests that these purposes and features necessarily interact.

These two purposes and two features of the systemic approach are explored more fully in the Instruction and Intervention Reflection Tools available in 2020. Each district may use the reflection as a guide to evaluating their existing instruction and intervention. This information can also inform their VTmtss Self Assessment and their Continuous Improvement Plan.

PRACTICAL MATTERS

Staffing

As schools and districts undertake ambitious systemic change, the question of who does what is usually an important one. In adopting the VTmtss Framework, some conventional roles and responsibilities may need rethinking. Making judicious use of expertise can be difficult. Just because a person can do something is not

41 The Vermont EQS note, "Student achievement begins with highly effective instruction, informed by research and guided by state standards and proficiency-based requirements." Proficiency-Based Learning (PBL) (2120.8. Local Graduation Requirements).

42 Aspen Education and Society Program and Council of Chief State School Officers (CCSSO) (2017), p. 3.

necessarily reason to do it. For example, an expert reading teacher may be able to work with large groups of students. But, if there are no other such experts around, he or she should be used judiciously – to work with the most vulnerable students and to mentor, support or coach other teachers.[43]

Throughout the *VTmtss Field Guide* the point has been made that success depends on the collaboration and engagement of *all professionals*. This may require reconsideration of roles and responsibilities.[44] Specialized personnel (reading and math specialists, special educators, guidance counselors, etc.) have traditionally provided additional intervention; however, classroom teachers often provide additional instruction, as well. In the VTmtss Framework, specialized personnel may be expected to support both students and staff in new ways and all professionals will be engaged in coordinated layering of supports.

Additional resources that may be helpful to districts engaged in shifts in thinking and staffing are provided in Digging Deeper.

Developing Expertise for Instruction and Intervention

As districts take up the work of VTmtss, some professionals may want to use or acquire new knowledge and skills. Careful consideration of the types of expertise needed is the first step.[45] With regard to Instruction and Intervention specifically, a robust and intentional program of professional learning follows from that self-appraisal. Some issues to consider:

- What specific knowledge and skill do staff already have that they can use to enhance instruction and intervention?
  - How do we make decisions about using the instructional expertise we have?
  - What ongoing support is offered to help educators deepen their existing expertise?
- Is there specific expertise that is implicated for our students?
- What additional expertise do they need to acquire?
  - Is there evidence for making the changes to the instruction and intervention we envision?
  - Does everyone need this expertise? How will that happen?
  - How is the expertise we need embedded in ongoing professional learning?

Further resources are included in Digging Deeper section.

Scheduling

Time is always an issue. Even when schools and districts have enthusiastically committed to a multi-tiered system of supports, finding the time to provide important layers of support and intervention is difficult. Different solutions are likely required for small schools vs large ones, as well as for elementary schools vs middle schools or high schools. Some general operating principles include:

43 Under Act 173, Vermont educators may have new flexibility in using their available expertise.
44 See "A Systemic and Comprehensive Approach" (Component 1), "Effective Collaboration" (Component 2), and "Expertise" (Component 5).
45 See "Expertise"(Component 5), p. 53.

- Be sure you know *why* you are scheduling the way you are. What are the benefits? Who will benefit? What is everyone going to do? Does it require expertise that we don't presently have?
- Do not impose a structure that limits your flexibility any more than absolutely necessary. For example, adopting a 30-minute intervention block means that interventions will always – and only – be 30 minutes long.
- Is there an "off ramp" for students receiving intervention? What assessments support making decisions about participation and release from interventions?
- Schedule to avoid fragmentation of time, teaching and attention.
- Be clear about how the proposed schedule is going to make maximum use of available expertise.
- Be alert to unintended consequences. Does our schedule mean that vulnerable students always miss the one thing they really enjoy? Does it limit any student's participation in important interpersonal activities?

For more information, see references in Digging Deeper.

Deciding On Interventions

Remembering that effective intervention starts with good, universal instruction, professionals may also need to explore interventions to address specific student needs. As noted earlier, it is especially important to carefully examine proposed interventions for evidence of efficacy and for data related to your specific student populations.

A great strength of using layered supports is that it promotes a rapid-response view of intervention within a culture of shared responsibilitiy for the success of every student. Yet, at the same time, care must be taken to implement interventions with integrity and to maintain the central features of the instruction and intervention. Similarly, a decision-making team should carefully consider the value of a particular support to a specific student. Then, careful monitoring can help answer the question of its efficacy. This is a delicate balance – move too quickly to adapt an approach and you may not realize its potential; stick to a failing tactic too long and you keep a student from succeeding.

This complicated set of circumstances, with its many variations for individual students and families, is one of the reasons that VTmtss insists on a systemic approach. Each of the components has implications for this one. In the last section of the *VTmtss Field Guide*, "VTmtss in Action," you will find examples of how some Vermont schools are using the Framework to address the challenge of supporting students appropriately.

Component 4: Comprehensive and Balanced Assessment System

Excellent instruction and systemic decision-making require high-quality assessment information. Assessment plays a central role in the assurance of equitable outcomes for all students. When we ensure that our assessment system provides comprehensive and meaningful information, then decisions about students are more likely to be accurate, students are better able to judge their own performance and set new goals, and families are more knowledgeable about how their children are doing and more likely to be partners and advocates for them. In addition, a comprehensive system can help the district and its schools make positive decisions about their own work – to support effective practices and initiate change when needed.

WHAT IS A COMPREHENSIVE AND BALANCED ASSESSMENT SYSTEM?

This component of the VTmtss Framework, like the others, is descriptive not prescriptive. A comprehensive assessment system contains within it all of the information needed for making decisions that enhance, ensure and improve quality, equity and opportunity. A balanced assessment system contains many types of information about students and about the system so that users can answer and explore a wide range of questions and can gain fresh perspectives on how to improve outcomes for all students.

> What is needed is an assessment system that provides decision-makers at all levels with sound information on which they can base their decisions in support of student learning. In a comprehensive system, there is a place for different types of assessment tools and processes, used for different purposes at different levels of the system: national, state, district, school, and classroom.

This component presents an organizing model that can be used to guide the collection, analysis, synthesis and use of the wide array of data available in a PreK–12 system. It acknowledges that different people, purposes and domains[1] reside within the umbrella of a Comprehensive and Balanced Assessment System.

Not everyone in the system uses all *types* of assessment and not everyone in the system needs the same kind of information. However, it is the responsibility of districts and schools to create and maintain an overarching Comprehensive and Balanced Assessment System that specifies "what," exactly, is part of the system, as well as how data are gathered, stored, documented, analyzed and used. All five components of VTmtss are focused on the common goal of improving education for all students. The unique contribution of this component to that end is that it allows educators, allied professionals, students, families, communities and state leaders to use data to inform their decisions. Good decisions require good assessment information.

Principle 5
A coherent, articulated, **balanced and comprehensive assessment system** guides responsive teaching, informs educators and students about progress, and leads to effective decisions within a continuous plan for improvement for both students and systems.

A CULTURE OF DATA-INFORMED DECISION-MAKING

In a complex system like education, even individual decisions are a part of an intersecting and interactive configuration of causes and effects. A culture of data-informed decision-making rests on a number of implied and explicit expectations and actions. It requires:

- strong leadership and an underlying systemic structure in place to facilitate and support the use of data;
- a focus on improving social-emotional, behavioral and academic outcomes for all students;
- a shared focus on using assessment information to improve instructional practices and outcomes;
- ongoing collection, examination, analysis and interpretation of data; and
- a range of trustworthy and relevant data (pieces of information) used to solve problems and make decisions.[2]

In reality, of course, there is not *one* culture of data-based decision-making. Context matters. Elementary schools, middle schools and high schools have different types of data available to them, and they are likely to be posing questions based on their specific culture and context. Similarly, very large or very small school districts are likely to be organized so that collaborative decision-making involves different individuals and structures. What is universal in an effective system is the assumption that people will try to put aside preconceived ideas in order to reveal unknown or unexpected opportunities for improving outcomes.

1 "Domain" is used throughout to signify a "sphere of knowledge . . . or activity" (Merriam Webster). It is used here to refer to the content areas present in most middle and high schools (and their sub-categories), but also includes literacy, social-emotional behavior, and transferable skills.
2 Darling-Hammond, Herman, Pellegrino et al. (2013).

ESSENTIAL ELEMENTS OF A COMPREHENSIVE AND BALANCED ASSESSMENT SYSTEM

A district-level PreK–12 model for comprehensive and balanced assessment includes elements and guiding questions like those shown in Figure 5.

The model is intentionally universal. It makes no attempt to detail, for example, how a teacher should assess his or her students in science or art. The details of a Local Comprehensive Assessment System (LCAS) provide essential guidance about how proficiencies are assessed at the local level and how teachers and students make use of these data on a daily, weekly or unit basis to inform teaching and learning.[3] Similarly, the model does not specify how student progress will be evaluated for the purposes of making determinations regarding special eligibility (see VT AOE specific learning disability [SLD] guidelines),[4] nor does it detail the responsibility of the schools and districts to assess students using large scale assessment tools.

What the model *does* do is create the architecture for districts to evaluate and build a comprehensive and balanced assessment system, one that can generate the data needed to make decisions – about students, about structures, about instruction, about resource allocation, etc. It also explicitly resides in a context and culture that values the use of data for making decisions, as described above and throughout the *VTmtss Field Guide*.

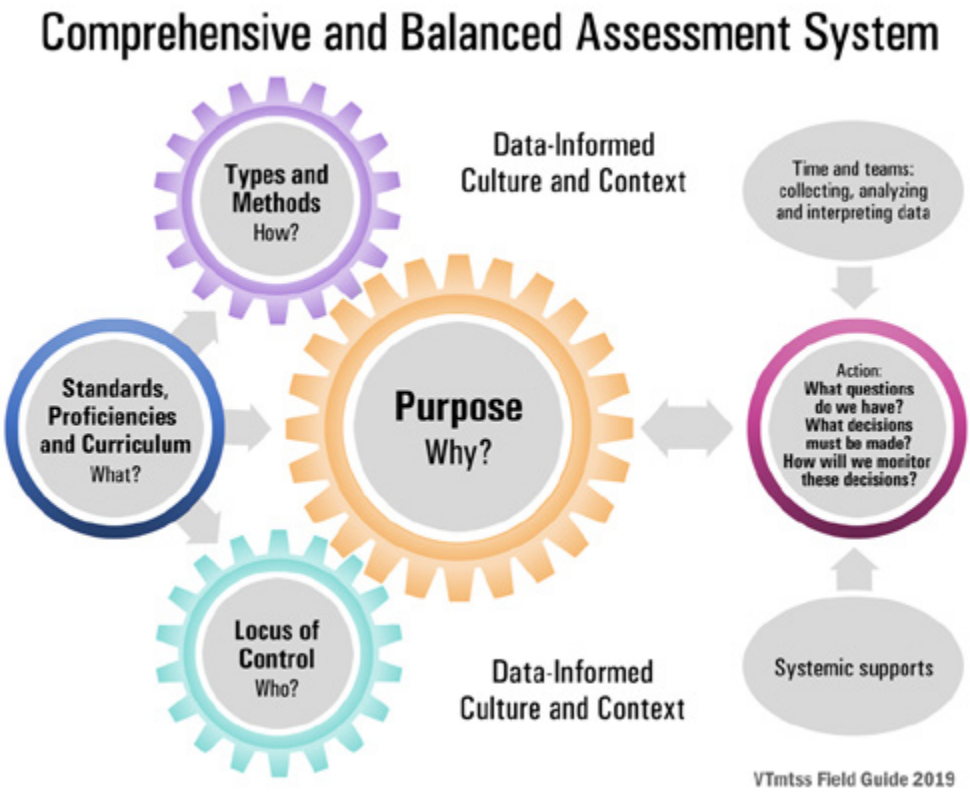


Figure 5 Comprehensive and Balanced Assessment Model

3 For more information on this document, see Vermont Agency of Education.
4 For more information on this document, see Vermont Agency of Education.

What: Standards, Proficiencies and Curriculum. Professionals need great clarity about the "what" of assessment. Local, state and national standards, outcomes, and proficiencies should, therefore, be reflected in the instructional curriculum and visible in the assessment system. Standards and outcomes that are clearly articulated invite appropriate assessment. Assessments do not tell us what is important to teach – our standards and curriculum do. The assessment system needs to *provide information* about what is important, not define it.

> When test results are the sole or even partial arbiter of future educational or life choices, society tends to treat test results as the major goal of schooling rather than as a useful but fallible indicator of achievement.[5]

A multi-tiered system of supports, and the assessment system that is part of its effectiveness, are strengthened when there are well-articulated standards and curriculum for academic, behavior and social-emotional skills.

To clarify "what is important," Vermont has adopted academic standards that schools and districts are expected to address in their universal instruction and assessment.[6] In addition, the state's adoption of transferable skills is applicable across content areas.[7] Individual districts and schools may also adopt standards through curriculum or add dimensions that are deemed important to their students and community. For example, many districts are articulating standards and curricula for behavior and social-emotional outcomes. Recently developed standards and accompanying assessments may be helpful to schools.[8]

A balanced system recognizes that no single assessment can capture all important aspects of standards and curriculum, nor important outcomes in every domain. Multiple, varied and recurring assessments are needed for that.

Why: Purpose. Purpose drives the assessment model (see Figure 5). Although it may seem obvious on the surface, it is not always easy to determine why an assessment is being used – and the title doesn't always help. There are many different names for assessments and, "sometimes these names or labels are interchangeable or synonymous; sometimes they are not . . . In the end, it's less the name that defines the assessment than its purpose(s) and use of results."[9]

Clearly no single assessment could provide useful information about all purposes. People who have different roles and responsibilities within the system usually ask somewhat different questions and need different information to make good decisions. For example, a teacher may design and use constructed responses each week for the purpose of judging students' readiness to move on to more complex material. On the other hand, a superintendent may use an array of annual assessment data for the purpose of identifying patterns across all students – or among subgroup – that can inform decisions about resource allocation.

Within a PreK–12 assessment context, there are many purposes for assessing. Some are quite straightforward and may be reflected in questions like:

- What do my students already know about this topic, skill or behavior?
- Did my students improve their knowledge, performance, behavior, self-control, etc. as a result of instructional opportunities and support?
- Which students seem to need more support? Which students need additional extensions or further challenge?

5 Madaus (1988), p. 43.
6 See Vermont Agency of Education, Student Learning: Content Areas.
7 See Vermont Agency of Education, Student Learning: Proficiency-Based Learning: Transferable Skills.
8 Durlak, Weissberg, Dymnicki, Taylor, & Schellinger (2011); Payton et al. (2000); Collaborative for Academic, Social and Emotional Learning (2019).
9 Chappuis, Commodore, & Stiggin (2016), p. 12.

Some purposes are more complex and may accompany questions like:

- Is our intervention improving outcomes for students who need additional support?
- Is the intervention working for *this* specific student?
- Are students using assessment information to inform their goal-setting?
- Are teachers and students collaborating to inform instruction and goal-setting?
- Are student outcomes in our district consistent with state standards and our own goals?
- Do we have the expertise we need to ensure equitable outcomes for all students?

> "It's less the name that defines the assessment than its purpose(s) and use of results."
>
> — Stephen J. Chappuis, Carole A. Commodore and Richard J. Stiggins, *Balanced Assessment Systems: Leadership, Quality, and the Role of Classroom Assessment*

How well assessments capture important outcomes is a matter for serious consideration. The **validity** of any individual assessment (how well it assesses what it says it does) is intimately linked to its use. For example, a large scale assessment that is meant to give a picture of the performance of *groups* of students is a very poor tool to use in determining whether a student has learned the content taught last week in biology. It is just this type of challenge that led the American Psychological Association to adopt language that evaluates assessments by asking whether the *interpretations of test scores are valid for their intended use*. In other words, an assessment (itself) is not *valid* or invalid. Instead, the user needs to be clear that the assessment has been analyzed and used in the way – and for the purposes – it was intended. The model (Figure 5) makes clear that all of the other "cogs" intersect with purpose and are also influenced *by* it.

Who: Locus of Control. In order to clarify purpose and use, it's important to think about the locus of control for the assessment data being generated. Who are the users of the assessments?[10] Who selected or created the assessment? Many experts talk about assessment decisions that are external or internal – those that reside outside the classroom and those that reside inside the classroom.[11] The locus of control for large-scale assessments like those created by the Smarter Better Assessment Consortium (SBAC) is clearly external. SBAC assessments are designed to capture important aspects of the standards we have set for students, but the data themselves and the kinds of questions that users ask are unlike what a teacher would create and ask.

On the other hand, a project – designed by a middle school science teacher – requiring students to develop a model that captures the structure and functions of a cell is clearly an example of internal assessment. In fact, students may actually be involved in identifying and shaping the type of data that will be assessed. Like the large-scale assessments, this project is designed to capture information about students' proficiency vis-à-vis standards, but it will also be used to address different questions and make different judgements. Each of these types of assessment provides useful information, but not to the same people for the same purposes.

Another way to talk about who impacts what is to consider the "grain-size" of the assessment. A large-scale test, designed to broadly assess proficiency in a domain, is likely to cover more content but less deeply. These are

10 Chappuis, Stiggins, Chappuis, & Arter (2011).
11 Wixson, Valencia, & Lipson (1994).

very useful to educators and community members at the school and district level. Similarly, an assessment that is closer to the classroom (used by teachers, students and parents) often covers less ground, but looks more closely at some parts of the domain. For behavior and social-emotional skills, the assessments typically rest closer to the classroom. However, data are usually aggregated within a district-level change system.

A hybrid locus of control is also possible. This is often the case, for example, when general educators and special educators are engaged in assessing students with special needs. A combination of externally mandated assessments and processes and internally generated observations and benchmarks is typically required to address determinations, evaluations and decisions. We return to this issue in the last section of the *VTmtss Field Guide*, "VTmtss in Action."

Educators and school-related professionals are not the only users of assessment data. Students, parents, families and communities also need useful information. Of course, these individuals use assessment data for different purposes than educators but we have a responsibility to provide information to these groups so that they can make good decisions also. "Student friendly" and "family friendly learning targets" are especially important when communicating with non-educator individuals.[12]

How: Types and Methods. The overall system will be most useful if it contains multiple types of assessment that address a wide range of student outcomes. The domains assessed in schools are often complex. The more challenging the decisions we have to make, the more important it is to have a comprehensive view of the domain, the student and the context. In addition, experts have recently noted that an equitable assessment process

> is mindful of student differences and employs assessment methods appropriate for different student groups. Underlying the idea of culturally relevant assessment is the focus on *students* [emphasis added] – the importance of keeping students at the center, which requires their involvement at every step in the assessment process and builds upon their lived experience.[13]

Comprehensive does not have to mean more. Having lots of assessment data that essentially convey the same type of information is not efficient or useful. In order to be helpful to the entire systemic enterprise, there needs to be a balanced array and these different assessment elements should "talk to each other." Not only are purposes and users different, but the nature of the assessments and the resultant data are usually different as well. The types and methods of assessment reflect the kind of information that might be helpful depending on the purpose and the use. Conventional tests are only one type or method of assessment. Using only this one type would limit what we know about students' knowledge and skills – and their ability to deploy them under different circumstances. A range of types and methods is needed to explore what students know, how students think, and what students do.

Today, it is common to use project-based and performance assessments in both large-scale and classroom-based assessments. These types of assessments provide an opportunity for students to apply knowledge, skills and behaviors to a complex situation. As a result, they can often provide new insights into learning for both teachers and students, and they can be tailored to specific cultural contexts.[14]

Even within a domain, multiple assessments are usually required. For example, social-emotional and behavior data collected on the playground may indicate that a student exhibits appropriate leadership and self-control,

12 Chappuis et al. (2016). See Practical Matters for ways to communicate with families about assessment information.
13 Montenegro & Jankowski (2017), p. 9.
14 See the discussion of Balance later in this component.

but data collected in the classroom might provide a very different picture. Similarly, a student may demonstrate proficiency reading a familiar narrative text but struggle when encountering a story that calls on experiences they do not have. Other students read narrative fiction quite comfortably but are challenged by non-fiction texts that make use of unfamiliar text structures and call on background knowledge and vocabulary they do not have.

Using multiple sources of information is likely to increase the **reliability** of the judgments made. In the case of reliability, we are asking whether the judgments made are (would be) consistent over time and across diverse student groups. It considers whether we can trust the decisions made based on the quality of the information generated. This is an especially important consideration when assessing students from diverse backgrounds. The assessment system must ensure that all students are afforded equitable means to demonstrate their learning. "Intentionally choosing appropriate assessment tools or approaches that offer the greatest chance for various types of students to demonstrate their learning so that assessment results may benefit students from all backgrounds advances our collective interest in student success."[15]

Culture and Context. Although most models of assessment do not consider context, research has repeatedly demonstrated how important a wide array of contextual factors are in student performance and outcomes.[16] VTmtss places a strong emphasis on using data to make decisions that improve educational outcomes. Student assessment information generally forms the basis for both identifying problems and generating solutions. However, a systemic approach to school improvement recognizes that there are many factors that may be impacting student outcomes, including: (a) all aspects of instruction and intervention; (b) the efficacy of professional collaboration; (c) the development and use of expertise; and (d) all aspects of the system itself – including scheduling, resources, etc. A comprehensive assessment system collects evidence about these as well. A very useful tool in evaluating aspects of culture, context and system is the VT AOE's Comprehensive Needs Assessment Toolkit.[17]

Of course, the quality and nature of *student* assessment data can be significantly impacted by a wide range of variations. Context and culture exert both direct and indirect influence on specific purposes, methods and users.[18] For example, student performance and specific practices and norms are usually different at grades K–5, 5–8, and 8–12, for example. The culture and context for large school systems are different than for small ones. In some districts and schools there are many students who do not speak English as their first language; in others students are geographically isolated and have unique life experiences. There are many other contextual factors that influence assessment results, some more obvious (e.g., students' physical and emotional well-being), and some less obvious. For example, (a) individuals read differently while taking a test than while reading for pleasure – with sometimes unpredictable results, (b) adolescents often exert less effort during standardized tests when they know that the results will not be used for grading, and (c) student behavior is highly variable across contexts. Therefore, it is important to identify what each of the elements in the assessment model means and looks like for your own setting.

A **Balanced System** includes multiple assessments and diverse sources of evidence. School districts can use the concept of a balanced assessment system to identify and organize the assessments they use with a "Data Inventory."[19] Appendix B provides a protocol for summarizing and reflecting on both systemic and student data.

With regard to student assessment data a balanced system requires individuals – or groups – to respond in diverse ways, using varying methods. Where appropriate, a comprehensive and balanced system invites students and families to be involved in the decision-making process.

15 Montenegro & Jankowski (2018), p. 5.
16 See the discussion of various contextual factors in Lipson & Wixson (2013).
17 Vermont Agency of Education (2019).
18 Ho (2016).
19 Vermont Agency of Education (2019).

When we are after a comprehensive picture of student knowledge and skills, both traditional and performance assessments can provide important information that is not available by other means. For example, high-quality performance assessments generally provide a more authentic purpose or context of demonstrating knowledge and skill. This can be highly motivating for some students who may be more inclined to demonstrate their abilities. Others may struggle to look proficient when the tasks demand application, transfer or application. Finally, performance assessments are more likely than traditional tests to support knowledge transfer to novel contexts.[20]

Generating an accurate picture of student outcomes rests on an array or data, generated in diverse settings, then analyzed and interpreted to explore areas of strength and opportunities for growth. Averaging results often masks significant variation in student performance; variation that can be used to plan instruction or make systems changes. The more consequential the decisions *for the student*, the more critical it is that we have a comprehensive (and balanced) view of his or her performance. In particular, there should be a clear process for identifying, assessing analyzing, and interpreting data for those students who are struggling. These students need careful monitoring and ongoing consideration from the Educational Support Team in the school or district which uses the data to make decisions about instruction, intervention and possible placements.[21]

An analysis of a particular school's overall assessment system may help a school to identify whether or not some types of student assessments are used more frequently or receive more emphasis over other types. That may be desirable – i.e., more ongoing assessment used to inform instruction would likely improve outcomes. However, if the analysis suggests there is too little range of types and purposes, adjustments should be made.

The specific tools and processes vary for specific users and may differ across districts and schools, but a trustworthy system is comprehensive enough to address all purposes and to capture the full range of critical components within the academic or behavioral domain and including those needed to meet federal and state guidelines for special education. "The challenge is to assure that the right forms of data are linked to appropriate uses and purposes for assessment."[22] Table 4 summarizes purposes and uses of types of assessment tools and provides commentary on some key issues for each.

20 Darling-Hammond & Adamson (2010); Vega (2014).
21 See the discussion Significance: Comprehensive and Balanced Assessment System for VTmtss that follows.
22 Valencia (2011).

Table 4 Balanced Student Assessment System By Purpose

Purpose: Screening[23]

To Identify Students Who Require a Closer Look or Additional Supports, or both

WHO USES THIS INFORMATION?	ASSESSMENT OPTIONS	COMMENTARY
Schools and Teachers use data to: • make initial decisions about universal instruction and personalized learning plans based on common patterns. • identify or flag students who are struggling, may be at risk of school failure, or who require closer monitoring. • raise unanswered questions about individuals or groups of students. **Administrators and teachers use data to:** • consider the effectiveness of core academic and behavioral curricula. • consider whether specific patterns of performance require additional expertise or interventions.	• Intentional review of existing assessment data (records review, progress monitoring data, etc.) • Ongoing formative assessment data • Examination of formative and benchmark progress monitoring data • Dedicated screening tool	• Screening is most salient when: - there is no comprehensive assessment system in place that provides ongoing information about students and - students are transitioning (i.e., PreK–K or middle school–high school), or there are many new students each year. • If high-quality data are reviewed on a fixed schedule, they may serve the purpose of screening in the absence of a designated tool. • Data for screening purposes are collected or examined for all students at grades K–12 one or more times a year; a diminished use of screening may be appropriate at middle and high school. • Data should permit exploration of trends for individual students and patterns within the total or disaggregated group (i.e., grade level or class, content, problematic time of day, location, etc.). • Tests dedicated to screening (sometimes called *universal screeners*) are generally the most important in the absence of data from a comprehensive and balanced assessment system.

23 See Commentary for the conditions under which the screening purpose is most necessary.

Purpose: Formative Assessment and Progress Monitoring

To Promote Student Learning and Inform Instruction

WHO USES THIS INFORMATION?	ASSESSMENT OPTIONS	COMMENTARY
Teachers use data to: • make decisions about what to teach, how to adjust their instruction along the way, and where to start or go next. **Teachers, students, and families use data to:** • set goals and consider additional supports • provide feedback to students, teachers and families about what has been learned, which proficiencies have been addressed, and what techniques have been successful. • monitor progress. **Administrators and districts may use (aggregated) data to:** • consider the efficacy of the curriculum and instruction for all students and subgroups. • raise questions about the strength of their systemic approach. • consider issues of equity and overidentification.	• Any data that shows teachers and students what has been learned and what needs to be addressed instructionally • Student engagement in the process is pivotal • Multiple modes and types of assessment tasks and performances are important to examine the application of learning to new contexts • Assessments of proficiencies as determined by LCAS	• Assessments only become formative "when the evidence is actually used to adapt the teaching work to meet the learning needs."[24] • Common assessments of shared content proficiencies (with common success criteria) can and should be developed at middle and high school to ensure equity and quality in the assessment process. • Common tools and techniques are employed across teachers and grades at elementary school. • Standardized information can be very helpful in planning overall instruction for groups of students. • Educators use ongoing formative assessment data (including student self-assessment) to refine and adapt instruction for groups and individuals.

24 Black, Harrison, Lee, Marshall, & Wiliam (2004), p. 10.

Purpose: Progress Monitoring for Periodic Benchmarking

To Monitor Progress

WHO USES THIS INFORMATION?	ASSESSMENT OPTIONS	COMMENTARY
Teachers, Students, and Families use data to: • examine student performance against an established grade-appropriate benchmark and identify students who may need additional support or intervention. **Teachers (individually and in teams) use data to:** • determine what progress has been made during a specific period for individuals and groups of students. • consider effectiveness of instruction for individuals and groups of students. **Administrators use data to:** • identify patterns of performance within and across grade levels. • support collaborative problem-solving. • consider the adequacy of curriculum and instruction. **District Leadership may use aggregated data to:** • identify possible strengths and areas of concern across the district in student outcomes. • support district teams in making decisions about instruction, curriculum or resource allocation. • consider when evaluating the effectiveness of the system.	• Ongoing formative progress monitoring data • Interim or periodic benchmark assessments • Standardized outcome measures • Assessments of proficiencies as determined by LCAS	• Assessments should be conducted at appropriate intervals for all students: - 3–4 times per year in grades K–4, - 1–2 times per year in grades 4–6, and - ongoing proficiency-based assessments in middle school and high school. • More frequent assessments occur for students receiving additional supports or participating in specific interventions. • An array of data can and should be used to monitor student progress. • A robust progress monitoring system can function in place of a separate screening measure.

Purpose: Outcome or Summative

Verify Learning and Evaluate the Effectiveness of Universal Instruction and/or Curriculum

WHO USES THIS INFORMATION?	ASSESSMENT OPTIONS	COMMENTARY
Teachers (and teams) use data to: • supplement data from throughout the system to consider student or class performance and outcomes in relation to established standards. • consider student performance across multiple platforms. **Students and families use data to:** • evaluate students' progress in relation to external norms, benchmarks or standards. • identify possible areas of strength or opportunities for growth. **Administrators use data to:** • confirm that students across the district are achieving outcomes that are expected for all students in the district or state. • examine the effectiveness of the system in supporting all students and identify gaps among groups.	• Standardized test data to assess outcomes • Benchmark progress monitoring data • Formative assessment data demonstrating learning	• Data from summative assessments are typically generated at the end of year, semester, course or instructional unit. • Because data provides information about individual students, and also about groups, it can be used to make decisions about instruction, curriculum and program adjustments. • Protocols for examining outcome data should support educators as they use data for diverse purposes. • When there is an external locus of control for the summative assessments (i.e., state or federal large scale assessments), the assessments provide better group data than individual data and have more utility for administrators at the building and district level.

Purpose: Diagnostic

Investigate and Analyze Learning Difficulties and to Tailor or Target Instruction or Intervention

WHO USES THIS INFORMATION?	ASSESSMENT OPTIONS	COMMENTARY
Educational Support or MTSS Teams (Teachers and Support Specialists) plan, select, and use data to: • consider possible causes of student difficulties. • analyze students' strengths and areas of need. • identify appropriate focus for supports, instruction and intervention.	• More detailed analysis of existing formative assessment and progress monitoring data • Additional measures to get a more comprehensive picture • Planful diagnostic teaching • Standardized diagnostic assessment tools	• Diagnostic assessment is conducted with only *some* students but is often necessary to plan instruction and intervention to meet the needs of students who are experiencing difficulty. • *Diagnostic teaching* (also called dynamic assessment) provides excellent information to tailor instruction and intervention.[25] • Students often provide excellent insights into their own learning strengths and needs. Their self-assessments should be carefully considered.

25 Lipson & Wixson (2013).

SIGNIFICANCE: COMPREHENSIVE AND BALANCED ASSESSMENT SYSTEM FOR VTMTSS

A comprehensive and balanced assessment system enhances outcomes for any school or district.[26] However, within the framework of a multi-tiered system of supports it is essential. VTmtss requires this system to be in place to ensure that:

- data on individual students is trustworthy enough to make decisions about instruction, intervention and level of support;
- teachers and district leaders have data about the systemic and patterned results they are getting (individual data are situated in a bigger picture of results);
- data teams have a comprehensive picture of the performances they are examining and the instruction and intervention that produced them;
- there is a balanced range of assessment types to address the specific purpose at hand;
- parents and students receive clear and comprehensible information about students' proficiency, behavior and social-emotional well-being; and
- decision makers have evidence and information about each component of the VTmtss Framework.

The true value of the VTmtss Framework is that it emphasizes improving outcomes for all students. This requires that the assessment system and its structures support individual students, and also that it provides information about how well the system is working. As Michael Giangreco has aptly noted, "We are trying to identify supports, not placements."[27] A multi-tiered system of supports anticipates not only that different students will need different types and intensities of support but that the information we have can be used to make important decisions to improve student outcomes.

Balance

> "Assessment information alone is useless; it should invite action. The data and information provided by assessment must be examined, discussed, reflected upon and used to make decisions."
>
> — Vermont Reads Institute, *Vermont Multi-Tiered System of Supports Response to Intervention and Instruction Field Guide*

A balanced assessment system contains information that addresses each of the purposes in Table 4 and each of the relevant components. In addition, it does so with *multiple* assessments; in some cases *repeated measures* of the same thing (to assess change) and in some cases *multiple types* of information about the same thing (to consider the multifaceted nature of most important outcomes). The quality of assessment measures becomes more important as the stakes increase. For example, the process used to determine whether or not a particular intervention is working or whether or not a student is eligible to receive special education services requires additional consideration regarding the degree to which an intervention or assessment is reliable and trustworthy. Generally speaking, this requires multiple measures – not just repeated use of one measure but different sources of assessment data. Appendix B provides a data inventory chart that may be helpful in deciding if your present assessments and assessment tools create a balanced approach.

26 See National Research Council (2014); Darling-Hammond et al. (2013).
27 Giangreco (2001).

Keys to Action[28]

A quality assessment relies not just on the data that are collected but on the structures that result in wise and effective use of the data. Overall quality, accuracy and timeliness affect the utility of assessment data but so do systems factors, such as the (a) school or district capacity to analyze and interpret data and (b) the structures for supporting collaborative discussion and widespread use of the information.[29] Districts need to ensure quality by providing professional learning opportunities so that all relevant educators:

- understand how to administer and use assessment data appropriately,
- can participate in team meetings to interpret and use results,
- work with others to use the data to inform practice and improve outcomes for all students,
- consider whether additional assessment is required to further understand the performance of some students,
- monitor progress for specific students and make appropriate changes when needed, and
- document decisions made.

ANALYZING AND INTERPRETING DATA: BRINGING MEANING TO DATA

Many assessment experts argue that the problem is not more data but more insight. Data are meaningless by themselves; they are given meaning though the context in which they occur in instruction and within which they are used.[30] Bringing meaning to data in the real world is highly dependent on who is using the information and why or how it will be used. In other words, this assessment component interacts significantly with the other components in the VTmtss Framework. For example, useful and impactful assessment depends on effective collaboration and team functioning.

Principle 6
Student proficiency increases when expert professionals **analyze and use ongoing performance data** to inform decisions and provide instruction that is responsive.

Collaborative Discussion of Data. Many schools and districts have found it helpful to organize their collaborative data discussions around a set of questions popularized by the DuFours:[31]

- What do we want students to learn? (**essential standards**)
- How will we know if they have learned? (**team-developed common assessments**)
- What will we do if they don't learn? (**systematic interventions**)
- What will we do if they already know it? (**extended learning**)[32]

Additional guidelines and focus tasks have been created by many districts and schools. However, it may be useful to refer to *Quality performance assessment: A guide for schools and districts*.[33] Although it is focused on performance assessments, it models and demonstrates the kinds of conversations that educators can and should be having.

Knowing *how and why* to use assessment information is essential. This is especially true for our most vulnerable students.[34] The comprehensive and balanced assessment system exists *not* so that all students will be assessed in

28 With thanks to Chappuis, Stiggins, Chappuis, & Arter (2012).
29 Lachat & Smith (2005).
30 Mandinach & Jackson (2012), p. 137.
31 These examples were generously provided by Tammy Boone, Milton (VT) Schools See also: DuFour (2004).
32 Another useful resource is the Data Wise course. Get more information.
33 Center for Collaborative Education (2012).
34 See guidelines for Educational Support Teams at Vermont Agency of Education, Educational Support Team.

all ways but, rather, that we get the right information to make good decisions that will improve outcomes for students with varying abilities and backgrounds. What does this mean in practice? It is recommended that schools and districts use the tools provided in Appendix B coupled with the guidance provided in Table 4 (Balanced Assessment by Purpose) to consider the types of decisions the system is already well-equipped to make. This will highlight strengths in the existing system and provoke consideration of any changes that may be needed.

Using Assessment to Provide Layered Supports and Intervention. Within VTmtss, the assessment component plays a particularly pivotal role since data are required to make decisions about individual students, their need for layered supports, and the impact of those supports on performance and proficiency.[35]

In order to answer the question of whether a student is responding to instruction and intervention, we need to be able to describe our instructional offerings and be clear about how interventions are addressing students' needs. "High-Quality Instruction and Intervention" (Component 3) includes a discussion of the ways in which some students who are struggling can access grade-level proficiencies at a precursor points – called progressions. These students require more frequent assessment to examine the impact of these supports and interventions.

The idea of progressions is extremely useful to assessment also. More frequent progress monitoring needs to be focused on the content and skills *being addressed in instruction* so that it can be adjusted as quickly as possible to continue moving the student toward proficiency. An over-reliance on monitoring only the target proficiency can mask genuine student growth and can also inhibit appropriate instructional planning. As well, the focus on target proficiencies can be detrimental to planning effective interventions for students with significant special needs.[36] Figure 6 shows how the measurement of progressive iterations of knowledge and skill might change with the student's increasing proficiency. Assessment of the target (benchmark progress monitoring) continues periodically. Vermont educators have access to both Common Core State Standards (CCSS) and also Common Core Essential Elements (CCEE) that permit assessments focused on grade-level expectations at *students' developmental level*.[37]

Creating a balanced and comprehensive assessment is usually an ongoing enterprise for schools and districts. The Practical Matters section addresses some recurrent concerns.

Figure 6 Monitoring progress as students move toward proficiency

35 Lewis-Palmer, Sugai, & Larson (1999); Sugai & Simonsen (2012).
36 Saez, Lai, & Tindal (2013).
37 For more information on this document, see The Vermont Agency of Education. See Practical Matters for a further discussion of progress monitoring.

PRACTICAL MATTERS

Because assessment information is often used to make very consequential decisions, every effort must be made to ensure that it provides trustworthy and meaningful information. Both the quality of the assessments and the ways in which they are used to promote equity and excellence. In addition, educators and others who use assessment results must be attentive to the larger cultural context within which students exist and must ensure that student diversity is considered during the interpretation of student assessment data.

VTmtss calls for a broad view of assessment – including data that can be used to assess all components of the VTmtss Framework. Districts need to think about how they design, select, collect and analyze data throughout the system and within each school. A useful model for school improvement is referenced in Digging Deeper and suggests collecting: (a) Student Achievement (or Learning) Data, (b) Demographic Data, (c) Program Data and (d) Perception Data.[38]

Vermont schools have a strong sense of the responsibilities regarding student achievement data and access and use the wide range of demographic data available in the state. Careful documentation of instruction and intervention are needed to make sense of student performance results.[39] In addition, thought should be given to factors that influence programs such as scheduling, resource allocation, and expertise. Similarly, tools such as surveys and forums are likely to raise and illuminate issues that may not have surfaced by examining student assessment data alone.

Some of the practical matters that may arise are noted below. Resources and suggestions for helping schools and districts address practical challenges in developing a comprehensive and balanced assessment system are available in Digging Deeper.

Too Much Data

Schools and districts may find themselves inundated with data. This generally happens for one of two reasons: (1) there is no efficient system for recording and managing data or (2) there is no intentional plan for what data should be collected and why. Put another way, this problem often raises the question: what do schools do with the data they have?

Efficient system for recording and managing data. In Vermont there are a number of systems that have been adopted. While not making a recommendation for any one of them, Digging Deeper lists links to those most commonly used in Vermont. Careful consideration of your context and culture are needed to select the best match for your system. Among the considerations might be:

- Who will use the data? For what purpose(s)?
- How easy is it for educators to enter data?

38 Learning Point (2004).
39 See VTmtss In Action, p. 59.

- Is it customizable?
  - Can local assessments be added to the platform and analyzed in ways that are helpful to us?
  - Can the platform link to systems that might be accessed by students and parents, as well as educators?
- Where are the data stored?
- How secure is the information?

Intentional planning about use. An intentional assessment plan is like a roadmap. It identifies what questions you want answered and what decisions will be made using the data. Then, it matches assessments to these concerns. Frequently, schools realize that they are collecting *too much of one kind of data*. Alternatively, they may decide that they are collecting information *too frequently* to make meaningful decisions. Finally, time and resources may be occupied collecting assessment information *on all students* (even when these are not really needed), while there may be *too little information about specific students*. Other protocols that may be useful in planning, evaluating and guiding use are located in Digging Deeper.

Too Little Data

This is the flip side of too much data. It generally occurs because people are not confident that the available information is leading to good decisions. This may happen for several reasons:

- the current system may not be balanced or comprehensive enough – there may simply be "missing pieces";
- the system may lack depth and nuance (i.e., most universal assessments do not provide information about why a student is struggling, only that they are), so planning instruction that is appropriately focused often requires additional formative or diagnostic assessment, or both;
- some standards and curricular areas are difficult to assess; or
- the tools needed to assess students may not be readily available.

A strong focus on the quality of the data and its utility can help the district build a meaningful approach. As well, a comprehensive approach can increase both the validity and the reliability of the information since multiple types and sources of data can be brought to bear on decisions.[40]

Communicating With Family About Assessment

Educators have a responsibility to communicate with families and communities about student outcomes. Indeed, this is required by law when the students involved are receiving specialized supports or interventions. Communicating assessment information in a comprehensible and meaningful way can be especially challenging. Parents and other community members may need additional information to make sense of the data that are shared. This should include information about how the assessment data will be used.

At the same time, this communication should be viewed as reciprocal. Families are often the source of important information about individual students. They may also help educators understand both the individual and the community context in ways that can bring greater insight into the interpretation of results. The resources located in Digging Deeper and "Effective Collaboration" (Component 2) are a good place to start.

40 See VTmtss In Action, p. 59.

Progress Monitoring

This is a complicated concept that has two major iterations: formative assessment and periodic benchmark assessment. Both are intended to monitor students' progress in relation to the *specific* content being taught and to consider whether the intervention or instruction is effective for individual students. The users of classroom-based **formative assessment** are typically teachers and students (and perhaps parents and families). Formative assessments provide real-time information that can be used immediately to make decisions about next steps in instruction and goal-setting.

Periodic benchmark progress monitoring is typically designed to determine students' progress toward grade-standards. These are most common in reading and mathematics at grades K–6 and are scheduled on an assessment calendar for 2–4 times per year. At the middle and high school level, periodic benchmark monitoring (vs formative assessment) is most likely to occur for students who are being followed more closely – either to determine if they require additional supports or to monitor existing instructional supports to see if they are having the desired effect. The users of periodic benchmark assessments may also include teachers, students and families. However, the data are also essential for asking and answering questions like these:

- How are our students performing, generally (aggregated by class, grade, etc.)?
- Is the achievement of this (specific) student adequate?
- Is this student making adequate progress given the instruction and intervention he or she is receiving?
- Do (other) team members need to become involved in discussions about this student?

For students who need significant support to meet targets, we recommend referring to the discussion of micro-progressions in "High-Quality Instruction and Intervention" (Component 3) and to the links to CCEE referenced earlier in this component.

There is considerable controversy about the means of assessment. However, this is less about "what" assessment than it is about whether it leads to good decisions.[41] In other words, teachers and other decision makers need the *right measures* with the *right frequency* to make decisions that help students accelerate their learning. Because research suggests that caution be exercised when planning or choosing assessment tools to monitor students' progress, the Digging Deeper portion for this topic includes more extensive commentary than you may find on other topics.

Finally, it is important to recall that a Comprehensive and Balanced Assessment System is just one component in a set of interacting pieces of the VTmtss Framework. In the final section of the *VTmtss Field Guide*, "VTmtss in Action," we describe how all of the components interact to promote better decision-making within a culture of continuous improvement.

41 Private conversation with G. Tindal, fall 2018.

Component 5: Expertise

When we have a job that needs to be done well, we usually seek a person with expertise – *deep knowledge or skill about the specific field*. We know that experts are often good problem solvers, collaborators, innovators, life-long learners and agents of change.[1] In Vermont, the importance of expertise in teaching and leadership roles is heavily emphasized and detailed in professional teaching and leadership standards,[2] educator quality policies,[3] and various professional evaluation systems.[4]

WHAT IS EXPERTISE?

Researchers have studied the development of expertise across a variety of contexts and identified general characteristics of experts, especially in contrast to novices. Experts:

- notice features and meaningful patterns of information that novices do not;
- acquire a great deal of content knowledge and organize it in ways that reflect a deep understanding of their subject matter;
- have knowledge that cannot be reduced to sets of isolated facts or propositions but, instead, reflects context of applicability, that is, the knowledge is "conditionalized" on a set of circumstances;
- can flexibly retrieve important aspects of their knowledge with little attention to effort;
- know their discipline thoroughly – *although this does not guarantee that they are able to teach others*; and
- have varying levels of flexibility in their approach to new situations.[5]

1 Berliner (2004).
2 Vermont Agency of Education (2018.)
3 See Vermont Education Quality Standards and Vermont Standards Board for Professional Educators.
4 See "A Vision of Excellence" by the Danielson Group and Learning Sciences International Marzano Center.
5 National Research Council (2000); Schulman (2013).

These characteristics apply to expert teachers, who also appear to do several things differently than their more novice colleagues.[6] Expert teachers are capable of weaving together a mix of different skills and knowledge to make decisions. They are highly attuned to the subtle cues of learning, which enables them to accurately infer whether pupils are making progress or not.[7] They are able to devote significant mental resources to this process because much of their practice is habitual.

> "It's not about the kids, it's not about the structure, it's not about the curriculum…. it's about the expertise."
>
> — John Hattie, *Visible Learning Mindframes: How Teachers Think Matters*

Researchers and scholars assert consistently that the expertise of a teacher is the most critical factor for student success.[8] But expertise in schools isn't just about teacher efficacy and student outcomes. It involves a broader view of what is essential for success throughout the comprehensive complex system. A school system will fail without expert administrators and teachers. Expertise in collaboration, assessment and instruction and intervention are all required for solving problems and making important decisions. Because no resource is more critical or valuable in schools and districts than expertise, a culture in which expertise is valued and cultivated is essential.

A CULTURE THAT BUILDS EXPERTISE

Schools are dynamic contexts in which individuals necessarily hold a range and variety of expertise related to their roles, responsibilities, talents and interests. Novice administrators, teachers and other professionals have a lot to learn and experience before they recognize patterns, make appropriate intuitive decisions and otherwise exhibit characteristics of experts.[9] While we cannot expect every individual within a school or district to be an expert, we *can* expect that there will be a culture that supports building the expertise that is needed for all students to thrive academically and socially. Within a culture that builds expertise, the very idea of learning and improvement is enticing! A growth mindset pervades.[10] Successes are celebrated; mistakes are treated as opportunities. Criticism, when voiced, is constructive and well-intentioned. Risk-taking to develop innovative ideas and insights is encouraged. Educators, staff, students, families and community members view themselves – and others – as lifelong learners, driven to continuously deepen and broaden their knowledge and skills. They believe that expertise is the cornerstone for sound decisions that can improve equity and learning outcomes for all students. The school community recognizes that building expertise is complex, meaningful work. It becomes business as usual to determine what knowledge and skills are needed for students' academic, social and emotional success and to tap the vital professionals, as well as family and community partners, to support the desired outcomes.

Nurturing such a culture requires not only vision and time but focused and sustained collaborative effort.[11] Supporting individuals in becoming increasingly proficient at their work requires access to a breadth of expertise. The school cultivates individual and systems expertise by examining roles and responsibilities, planning ways to address gaps through thoughtful hiring and evaluation practices, securing embedded school level support, and providing high-quality professional learning.

6 Schempp, Tan, & McCullick (2002).
7 Berliner (2004); Wolff, Jarodzka, & Boshuizen (2017).
8 Darling-Hammond (1998); Darling-Hammond & McLaughlin (1999); Hattie (2012) (2015); Rand Corporation (2012).
9 Tsui (2003); Gallant & Schwartz (2011).
10 Dweck (2016); Johnston (2011).
11 Bryk (2010).

In a school culture that builds expertise, learning happens continuously for everybody. All professionals and staff take responsibility for keeping up with current research and developments in their fields and are supported in doing so. Most learning opportunities occur intentionally, as teachers and administrators engage in their daily work and share their experiences and insights with each other. Leadership ensures sufficient infrastructure to support educators learning together with and from experts from inside or outside the school. Mentorships, coaching, discussion and study groups, action research, peer observation, Professional Learning Communities,[12] and Networked Improvement Communities[13] form to solve problems and to create opportunities to learn. Reflection on personal and professional growth is part of each type of professional learning.

ESSENTIAL ELEMENTS FOR BUILDING EXPERTISE IN SCHOOLS

The work of building expertise requires that schools examine and bolster their greatest assets, the professionals in the building. This begins with identifying what is required *in each particular context* to create conditions for expert decision-making and teaching that support all students. Action plans then target effective professional learning to build and support expertise. Researchers have identified elements that exist consistently within schools that value and build expertise:

- ongoing analysis of student data results in the allocation and alignment of expertise with responsive teaching decisions;
- the most vulnerable students receive supplemental instruction and intervention from teachers who are experts in the targeted area of student need;
- programs, policies and resource allocation guidelines empower educators and families to access the expertise needed for each student to succeed academically, behaviorally and socially;
- collaborative arrangements ensure that people with relevant expertise are involved in solving complex problems and in making important decisions for students;
- policies, structures, schedules and resources enable collaborative inquiry into instructional improvement and participation in corresponding professional learning;
- standards-based curricula and professional standards are continuously studied, understood and applied;
- evaluation systems encourage a growth mindset through thoughtful conversation and reflection about goals for building and attaining expertise;
- leadership creates a system for identifying the expertise that exists in the district – and also gaps that exist – to create a plan for how to access and develop needed expertise; and
- hiring decisions give priority to building expertise needed for the success of the system.

That most of these elements appear in prior sections of this guide underscores the centrality of expertise in improving school systems and in implementing VTmtss effectively. Schools clearly cannot make a real difference in student achievement by working with one teacher at a time, or focus on a select group of teachers or students. Successful schools develop an *expert system*, so that students get the expertise they need, when they need it.[14]

SIGNIFICANCE OF EXPERTISE TO VTMTSS

Expertise is the most powerful lever at our disposal to ensure that we make the best decisions to improve experiences and outcomes for all students. Most professional literature about expertise in schools emphasizes the importance

12 Dufour (2004); DuFour, DuFour, Eaker, Many, & Mattos (2016).
13 Bryk, Gomez, & Grunow (2011); Bryk, Gomez, Grunow, & LeMahieu (2015).
14 Ehren, Laster, & Watts-Taffe (2009).

of excellent teaching and the development of teacher knowledge and skill. While there is no denying the role of each individual's knowledge, skill and experiences in teaching and in other decision-making, we assert that those decisions happen within complex, ever evolving systems. Expertise in isolation can do much to improve conditions and outcomes, but a multi-tiered system of supports calls for more. It calls for continuous improvement of the system's expertise.

All five components of VTmtss require significant expertise. If we want to increase the levels of quality across the system, we need to have a clear picture of what expertise is needed within and across components. How well does the system equitably employ its resources, manage its logistics, encourage collaboration, leverage its data, and apply best practices in instruction and intervention? Specifically, within VTmtss we should consider these big ideas:

- Where does our expertise currently reside?
- What resources do we need to expand our expertise to ensure that all students make progress?
- How can we use our expertise most judiciously? (Are our students getting what they need, when they need it, where they need it from the most expert professional available?)
- Are our most vulnerable learners receiving the appropriate supports from our most expert educators?
- Do we have a variety of data, which are appropriate for the decisions we need to make?
- How have we included students' and families' opinions and voices?
- How well do we know how to analyze and interpret data to support effective outcome-oriented decision-making?
- Do collaborative arrangements include appropriate and relevant expertise to support student outcomes?

These questions about the system's expertise are essential in order to plan appropriate high-quality professional learning for a multi-tiered system of supports.

Building Expertise within VTmtss

Collaborative analyses of student data to determine gaps in learning outcomes,[15] when conducted within a culture that values and builds expertise, can lead to productive discussions about whether students experienced equitable opportunity to learn that specific content or skill, and whether they had access to the expertise needed to ensure success. Schools, therefore, need to first determine *where the expertise their students need* lies. Where is it? Where is it not? Who has it? Who does not? How do we build capacity in the areas where there are gaps in expertise?

Again, context matters. Greatly. Expertise needed in elementary schools differs from that needed in middle and high schools. Small schools may not have access to the range of expertise that is readily available in large schools. And our students are our prime variable.[16] One school may have no need for an occupational therapist, for example, while a neighboring school of similar size and demographics may need one for several students. We do not, therefore, provide a list of the specific types of expertise needed within a school system. That information is attained through each school's comprehensive and balanced assessment system, targeted surveys and assessments, analyses and discussions that fuel the development of professional learning plans for continuous school improvement. For VTmtss, that means building and sustaining expertise for success within and across each component.

15 See "Comprehensive and Balanced Assessment System" (Component 4), p. 35.
16 Bryk et al. (2015).

Because many types of professional learning opportunities abound, an intentional approach is critical. Administrators, educators, staff and other stakeholders collaborate to decide the expertise they need to build and maintain when determining professional learning and the most effective types of professional learning to do so. Some important questions that school leaders address as they formulate a professional learning plan are:

- What professional learning is needed to build a common language and shared vision for our goals?
  - How do we align school goals, district goals and individual professional growth needs?
  - How do we judge the quality of the professional learning opportunities that we plan?
- How much intensity is needed for the specific professional learning?
  - Is this something everyone needs to know and do? Who does? Who does not?
  - How can this sustain a systemic practice or process?
  - What professional learning does new staff need to sustain the shared vision and common practices?
- What approach (or combination) would be the most effective for our needs:
  - Consultant or Embedded school support
  - Coaching
  - In-service workshops
  - Conferences, workshops
  - Courses
  - Study Groups, PLCs, Critical Friends arrangements
  - Network participation
  - Other
- How is the learning sustained and supported?
  - What systems and resources support professional growth?
  - How do our teacher evaluation approaches enhance the development of expertise in use?
  - What types of hiring decisions will best reflect our understanding of the professional expertise needed?
  - Which tools are best for measuring the impact of professional learning resources?

In answering these questions, schools and districts necessarily think through the implications for staffing, funding, and scheduling. Of course, there are practical matters associated with these questions.

PRACTICAL MATTERS

Assuring High-Quality Professional Learning

> "Increasing the effectiveness of professional learning is the leverage point with the greatest potential for strengthening and refining the day-to-day performance of educators."
>
> — Ruth Chung Wei, Linda Darling-Hammond, Alethea Andree, Nikole Richardson and Stelios Orphanos, *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the United States and Abroad*

High-quality professional learning fuels the ongoing work required to build expertise and foster continuous, systemic improvement. For most educators, professional learning opportunities are the most accessible route for developing new knowledge and skills to improving academic, behavioral and social-emotional outcomes for students. Well-designed, high-quality professional learning is the most powerful tool for schools to support the acquisition or refinement of expertise. See Digging Deeper for links to resources that support high-quality professional learning.

Professional Learning About Foundations of VTmtss

When a school or district commits to a tiered system of supports approach, educators, staff, families and community partners will need to learn about the VTmtss Framework – what it means and how their current initiatives relate to it. The *VTmtss Field Guide* is an excellent resource to help schools build expertise about VTmtss and is available online, allowing for flexible use and periodic updates. The Digging Deeper section of this guide (see page 112) provides resources to support professional learning about VTmtss. Facilitated conversations by educators in their own school or district, such as a networked improvement community or study group, are additional ways to expand and improve the expertise of a system.

Hiring for Expertise

Hiring and teacher quality are intrinsically connected. The question of what expertise is needed to improve all of our students' academic, behavioral and social-emotional outcomes in a school is paramount. A selection process based on an understanding of what exists and the needs for specific expertise within the unique context, as well as knowledge of research-based qualities of effective educators, will increase the likelihood of improving outcomes for all students. See Digging Deeper for links to resources that provide information to help decisions related to hiring for expertise.

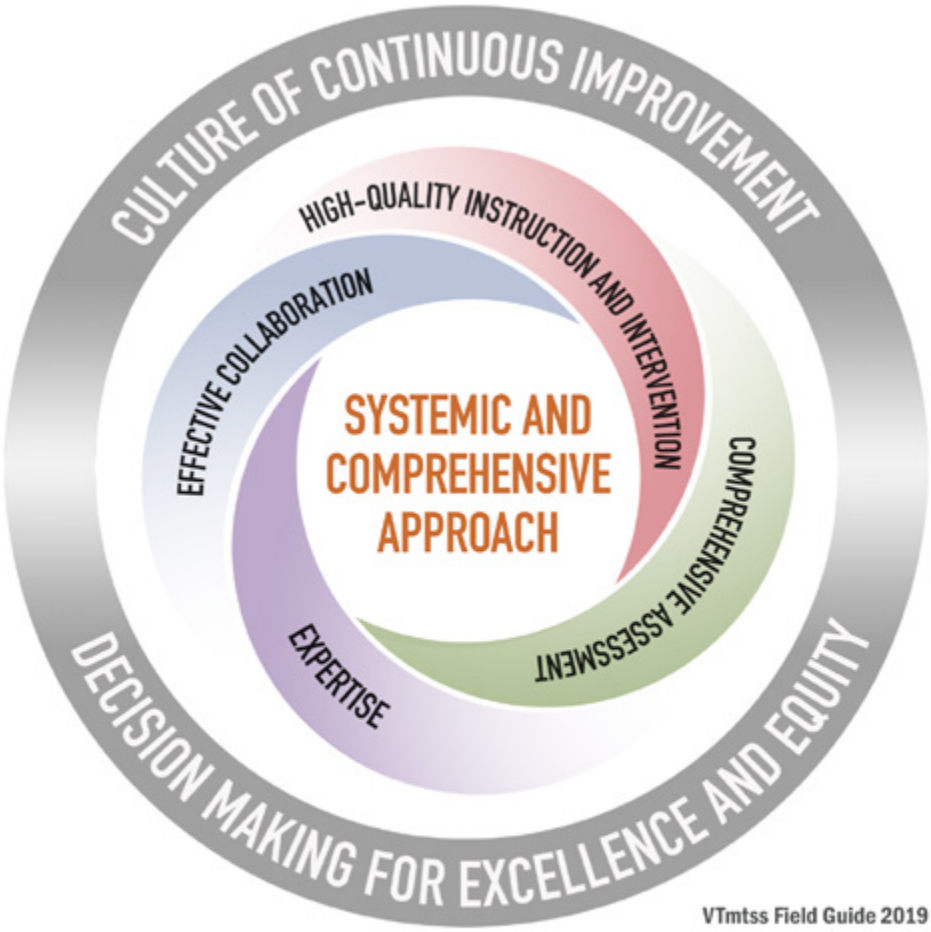
Sustaining Expertise: Staff Supervision and Evaluation

In addition to thoughtful hiring, ongoing effective staff supervision and evaluation is central to the development and maintenance of expertise in districts and schools.

> Despite common perceptions, effective teachers cannot reliably be identified based on where they went to school, whether they're licensed, or (after the first few years) how long they've taught. The best way to assess teachers' effectiveness is to look at their on-the-job performance, including what they do in the classroom and how much progress their students make on achievement tests. This has led to more policies that require evaluating teachers' on-the-job performance, based in part on evidence about their students' learning.[17]

While the *VTmtss Field Guide* does not recommend specific models or materials, some guidelines for creating or selecting a system for staff evaluation and supervision for your school can be helpful and are provided in Digging Deeper.

17 Rand Corporation (2012).



VTmtss in Action

The VTmtss Framework supports the design of a coherent system so that the knowledge, information and expertise already embedded in a school or district can be brought to bear on problem-solving and decision-making for questions or concerns facing individual schools, districts and communities. VTmtss is a decision-making framework that can be used to focus, integrate and align existing school improvement efforts with any new strategies that are adopted.

When the VTmtss Framework is robust, it provides the structure to address new development and initiatives facing Vermont districts. Schools and districts cannot keep adding new initiatives without considering how any one of them relates to their own bigger vision, goals, objectives and needs.

Principle 10
These principles are **interrelated** and most effective when **integrated within a coherent plan for continuous improvement** that recognizes how recursive assessment, reflection and adaptation improve instruction and increase student achievement.

No single component of the VTmtss Framework is a proxy for any or all the others. They work in concert. By focusing on the whole model, districts are more likely to achieve the ambitious goals they have for their schools and communities.

USING THE VTMTSS FRAMEWORK TO GUIDE ACTION AND MAKE DECISIONS

No change between the first *Field Guide* and this edition is greater than the focus on action throughout the educational cascade. Decision-making is not an isolated part of the VTmtss Framework.

Thoughtful reflection and informed action are required in every component of the work in order to fully support each student in achieving challenging goals. We emphasize that this is not just desirable – it's imperative. The system – the whole set of components – is what will give decision-making its power and increase the potential for real change.

Principle 8
The foundation for effective problem solving / decision-making is a dynamic, positive and productive **collaboration** among students, families and professionals.

If each component is working well, and each is informing the others, then decision-making can be based on *the system*. Using data and information from the *whole* system, we are better able to consider questions like:

- Are all of our students doing equally well? If not, who is doing well and who is not?
- Does our system support authentic and substantive collaboration? Is that collaboration helping the students, staff and families?
- Is our instruction and support challenging enough for all of our students?
- Are some areas of our work yielding less desirable results than others?
- Are students receiving timely and effective support and intervention when needed?
- When making high-stakes decisions about students, is our process comprehensive and trustworthy?
- Are there unintended consequences to our systemic approach?
- Do we have enough time to do the things we value most?
- Should we adopt a new program (e.g., math or literacy) or approach for universal instruction?
- Do we have the (right) expertise to accomplish our goals? Are the right people available when we need them?
- Are the parents and community members engaged in and well-informed about the work of our district and its schools?

Of course there are many more questions that may be posed.[1]

Using the System to Identify the Problem

One of the biggest challenges is identifying the *right* problem. Choose something too small, and it won't matter. Choose something too big, and it may not be possible to solve (in the short term). In most districts, there is not just one problem or desired change, nor can any given problem be addressed with a one-dimensional approach. Indeed, diverse stakeholders often have different ideas about the nature of the problem. In addition, concerns at high school may be very different from those at elementary school. It is generally not useful to locate the problem in just one area without examining the problem *in context*. The model displayed in Figure 7 is designed to support this type of big-picture thinking. Additionally, the figure highlights the need to consider each of the interrelated components of the VTmtss Framework when identifying problems and making decisions. The three examples below demonstrate how a systemic approach can be used to identify problems within specific contexts.

1 For examples of Vermont schools that have undertaken important problem-solving work, see Vermont Vignettes, p. 74.

Figure 7 Using the VTmtss Framework to Generate Questions and Influence Decisions

Example 1: "White Spruce Middle School" is very concerned that their collaborative team time is not working effectively. Teachers are not engaged in substantive conversations about student performance and do not follow up instructional suggestions with action. The administration wants to provide training in a new collaborative protocol for teams. However, a closer look at the entire system suggests that the problem may have different roots. For example, the assessment system in the district (and at the school) provides very little information about student proficiency generally and about the progress of individual students specifically. As a result, conversations during collaborative team time tend to lack depth and suggestions for instruction are necessarily quite general. Other aspects of the system may be contributing also. For example, the timing of meetings may mean that only some professional expertise is represented, teachers may lack the expertise needed to create progressions that would support learning,[2] etc.

2 See "High-Quality Instruction and Intervention" (Component 3), p. 26.

Example 2: "Cherry Town Elementary School" remains concerned about the poor academic outcomes for many of its students. They have created instructional blocks for both literacy and mathematics and also created a dedicated 30-minute intervention block in the schedule. Students are assigned to intervention blocks on the basis of their performance on summative and benchmark progress monitoring assessments. Nevertheless, they have not seen a significant improvement in student performance, particularly for their historically marginalized students. An examination of all the components of their system indicates several things: (1) coordination between classroom teachers providing universal instruction and specialist teachers providing support and intervention is very limited – techniques, prompts and even goals are often different across settings; (2) there is uneven expertise among teachers and not everyone is clear about what interventions or supports are needed during the intervention time; as a result, (3) there is limited fidelity to any approach; (4) diagnostic information that would help teachers tailor their instruction is not available; and (5) roles and responsibilities within a complex instructional context are poorly defined.

Example 3: "Hamilton High School" is a school that has experienced quite a lot of change over the past five years. There has been fairly rapid turnover of both faculty and administration due to retirements and budget pressures. Faculty are feeling the urgency to respond to a number of state mandates and deadlines. While teachers have been attending many different professional learning opportunities in groups and individually, new insights and expertise are not linked in a coherent way to over-arching initiatives. Finally, feedback suggests teachers feel that new initiatives are supported *initially* by the district but they often feel the need to move on to new initiatives before earlier efforts are fully supported or completed. So, the school has the "start" of a four-year advisory system, criteria for proficiency-based graduation requirements, and Personal Learning Plans (PLPs). However, none of these is really linked to a system for using this information to support the redesign of instruction and assessment. The first-year principal wants to take on new initiatives but action taken without a thorough look at what is already happening is likely to meet resistance.

These examples are meant to demonstrate how important it is to understand the whole picture before deciding what action to take.

Understanding the System that Produces the Current Outcomes

> "The critical issue is not what works, but rather what works, for whom and under what set of conditions."
>
> — Anthony S. Bryk, Louis M. Gomez, Alicia Grunow and Paul G. LeMahieu, "Breaking the cycle of failed school reforms"

In the past 20 years, we have learned that context matters and, also, that when adopting any new innovation we should expect variation. "The critical issue is not what works, but rather what works, for whom and under what set of conditions."[3] In order to identify the key factors and influences, it is typically critical to understand the system that produces the current outcomes.[4] In other words, how do the specific contexts and cultures in the local community support or create barriers to change?

Principle 2
A well-developed, coherent and comprehensive **system** ensures **equity** by providing an appropriate context for learning with layered supports and **personalized** instruction for **all students**.

3 Bryk, Gomez, Grunow, & LeMahieu (2015a).
4 Bryk et al. (2015a).

There is no substitute for self-examination and reflection in the decision-making process. An important first step involves taking stock – identifying the strengths and opportunities for growth in each of the component elements of VTmtss. This phase will be most impactful if the conversations and self-assessments are conducted purposefully to gather as much information, from as many different intersecting elements of the system, as possible.

Districts that have already begun this work will have some ideas about what can and should be addressed. Indeed, they may have already tried some things and discovered important insights that can help them refine their approach. For districts that are new (or newer) to VTmtss, the brief self-reflections offered in the VTmtss in Action Reflection Tool may be a good starting point. These initial conversations can be used to inform the VTmtss Self Assessment.

In either case, both the statewide continuous improvement planning process and the VTmtss Framework invite districts to consolidate information and align innovations throughout the system to determine productive areas for action.[5] The model in Figure 7 can be used to both generate questions, identify problems and determine the nature of the decisions to be made. It can also be brought to bear on problems that have already been identified.[6]

Significant change and sustained improvement take time. Rapid change is possible in a very short time (two to three years). However, research conducted in Vermont (and elsewhere) suggests that the timeframe for sustained improvement is five to ten years of focused action and refinement.[7] That is one of the reasons why it is so important to build a culture of continuous improvement as a foundation that can respond to changing realities and build on interim successes.

A CULTURE OF CONTINUOUS IMPROVEMENT FOR EQUITY AND EXCELLENCE

In this edition of the *Field Guide* the original components of a multi-tiered system of supports have been encased in a bigger idea – the goal of creating a culture of continuous improvement designed to promote equity and excellence through effective decision-making. Building a culture of continuous improvement is not easy and it is dependent on the following elements.

Making Decisions and Taking Action

There is no shortage of action being taken in Vermont schools and districts. Over the past 25 years, there have been repeated calls for school change at both the national and state levels. Almost two decades ago, the (then) Vermont Department of Education published a foreword-thinking *Equity & Excellence Action Planning Guide* which made the point that, "Successful schools do not happen by accident."[8] The intention to work toward more powerful and more widely applicable outcomes for all Vermont students is a long-standing tradition. However, most of us would agree that there is still work to be done to realize these goals. How can we improve? How can we sustain the efforts that do make a difference? How can we continue to improve?

The successful use of a continuous improvement process requires both will and capacity. The cultural contexts we have described throughout the *VTmtss Field Guide* are critical for developing and supporting the *will* to engage

5 Vermont Agency of Education (2018a).
6 See Vermont Vignettes for examples, p. 74.
7 Lipson, Mosenthal et al. (2004).
8 Vermont Department of Education (2000).

in change, enhancement or improvement. Equally important, though, is the capacity and *skill* to do this work. The VT AOE's *Education Quality and Continuous Improvement Framework* provides extensive information about how to enact a continuous improvement approach and also provides tools and strategies for planning.[9] Additional tools for enacting the framework are also available.[10]

The taking stock reflection and problem identification that we recommended above should lead quite naturally to the next: beginning to take action. Questions like the following can lead to productive conversations among various stakeholders:

- What change might we introduce (to address the problem)?
  - How much change needs to occur?
  - Where should the change occur?
  - Who will participate in the change process?
- How will we know whether or not that change is an improvement?

While identifying the *right* problem is really important, a Culture of Continuous Improvement calls for iterative cycles of innovation, data gathering and analysis, and adaptation. This opens the door to reconsidering or altering original ideas in response to emerging information. Effective measurement and assessment is critical to this iterative approach.

It can be challenging to cultivate a view of change that isn't based simply on implementing the right method or program. Continuous improvement recognizes that organizations (and people) tend to improve in cycles, rather than "one and done." Even when innovations result in improvement, they may not get us all the way to our goals. They may even reveal new problems that we could not see before.

Growth Mindset

Districts and schools across the country are beginning to build a professional culture that supports and promotes a *growth mindset*. It is difficult to imagine how an organization could adopt a culture of continuous improvement without this shift in perspective. Individuals with – and organizations that promote – a growth mindset "worry less about looking smart and put more energy into learning."[11] In other words, organizations with a growth mindset understand that we may try things that don't end up working in the way we had hoped or that have unintended consequences. When unexpected things happen within a setting that promotes a growth mindset, attention is quickly turned to figuring out what was learned and what needs to be done next. Not surprisingly, "when entire [organizations] embrace a growth mindset, their employees report feeling far more empowered and committed; they also receive far greater organizational support for collaboration and innovation."[12]

Building a culture of continuous improvement is not easy and it is dependent on the following elements.

Building Trust

Building relational trust is an important condition for innovation and change. Indeed, it has been called a "core resource for improvement."[13] A growth mindset is not possible unless professionals feel respected and believe that

9 Vermont Agency of Education (2018a).
10 Vermont Agency of Education (2019).
11 Dweck (2016).
12 Bryk & Schneider (2003).
13 Bryk, A. S. (2010).

the culture is a safe environment to take risks. Teachers are much more likely to take up challenging new initiatives if there is a culture of strong institutional and relational trust, and administrators are more likely to encourage teachers to engage in instructional leadership and decision-making when these conditions exist.

Multiple researchers point to the importance of leadership in establishing this relational trust. Organizing around a "compelling school vision" helps to build and sustain this trust.[14] But it is not enough.

> [T]rust cannot be easily separated from expanded teacher empowerment and influence. Teachers are not passive actors in the school, but co-constructors of trust. As active professionals, teachers who feel left out of important decisions will react by withdrawing trust, which then undermines change.[15]

This quote reminds us that leaders are not the only determinant of a climate of trust. Once again, it is important to note that contexts vary. In schools with strong relational trust among the faculty, it may be easier to introduce change. Research suggests that there are several "enhancers of trust."[16] These are environments in which:

- both administrators and teachers demonstrate competence in fulfilling their roles,
- professionals trust in the abilities of their colleagues,
- professionals feel that they have influence over how decisions are made,
- stakeholders believe that their interests are considered during decision making, and
- decisions are documented and the effects from changes are measured.

Parent–Community Engagement

The importance of responsive relationships between a school and the broader community, including parents and families, is well-established in change research. In fact, the concept of **school community**, as defined in Vermont documents, notes that this concept

> usually refers to those stakeholders *invested in the welfare* of a school and its community. A school community includes school administrators, teachers, school staff members, students, their parents and families, school board members and other community members.[17] [emphasis added]

Schools are more successful when they reflect, engage with and capitalize on community culture and context in authentic ways.

It is also clear that school improvement is easier in some school communities than others. Bryk's work is especially compelling here. He concludes that the "social capital of a neighborhood" and the strength of a community's local institutions make critical contributions to change and improvement in schools.[18] When schools and communities can marshal these resources together, they are more likely to attain and sustain improved outcomes. On the other hand, change is extremely difficult to achieve and sustain in communities with high levels of stress and trauma. "In the end, melding strong, independent disciplined inquiry with a sustained commitment among civic leaders

14 Bryk, A. S. (2010), p. 27.
15 Louis (2007), p. 18.
16 Louis (2007), p. 20; Louis, Dretzke, & Wahlstrom (2010), p. 218.
17 Vermont Agency of Education (2018b).
18 Bryk (2010), p. 28.
19 Bryk (2010), p. 30.

to improve schooling is the only long-term assurance that an education of value for all may finally emerge."[19] Finally, it is important to recall that, "it is hard to improve what we do not understand."[20] School change is embedded in culture and context and equity requires careful consideration of the ways that the school supports and enhances community and vice versa. There are many guidance documents for ways to increase parent and community engagement and build trust. We refer to these documents in Practical Matters.

Leadership

In the "A Systemic and Comprehensive Approach" (Component 1), there is considerable acknowledgement of the importance of effective leadership. We return to it here as a reminder that a culture of continuous improvement requires strong leadership.[21] Indeed, it is sometimes called the "driver for change."[22] Research nationally and here in Vermont points to the pivotal role played by committed administrators who help the system stay focused.[23]

But what kind of leadership leads to this focus on improvement? Leaders must lead by modeling the values and behavior that support continuous improvement. There is no substitute for effective leadership, but there are also few remedies for poor leadership. One of the advantages of engaging in a systemic approach using a VTmtss Framework is that it can be used to make all sorts of decisions, including what type of leader a district should hire given the work that people have committed to doing. Sustaining change is at least as difficult as attaining it. There should be demonstrable evidence that the match is a good one when hiring and engaging in professional learning should advance the priorities and actions that have been agreed upon by the leadership team(s).

Role-based theories of leadership wrongly envision leaders who ask or require others to do things that they themselves may not be willing or able to do. But if learning – individual and collective – is the central responsibility of leaders, then they must be able to model the learning they expect of others. Leaders should be doing, and should be seen to be doing, that which they expect or require others to do. Likewise, leaders should expect to have their own practice subjected to the same scrutiny as they exercise toward others.[24]

Learning to Improve

Any experienced educator can tell you that there have been many reform attempts over the years. Few of them have created sustained improvement in outcomes for all students. The promise of a continuous improvement approach is that it can help break the cycle of failed school reforms. By focusing on schools as *learning organizations* we can involve practitioners in the authentic enterprise of improving practice (and outcomes) over time. The public education of all students is a complex enterprise. Any sustainable improvement is likely to take time and may need to be adapted as the effects of change reveal themselves in the real world. The goal is to create a system that can respond to change and adapt to unintended outcomes and changing demographics. Needing to change course should not be viewed as a failure, but as evidence of learning and thoughtful adaptation.

20 Bryk (2010), p. 30.
21 Mapp & Kuttner (2013).
22 Mapp & Kuttner (2013), p. 6.
23 Lipson, Mosenthal et al. (2004).
24 Elmore (2000), p. 21.

REPRISE: DECISION MAKING FOR EQUITY AND EXCELLENCE

Vermont is working to provide equitable opportunities for *all* students, opportunities that result in academic excellence and resilient, productive citizens. Lessons from research and practice suggest a couple of directions that hold promise for making significant headway on these ambitious goals. One of those involves the development of a school culture focused on improvement. Each component of the *VTmtss Field Guide* has highlighted the elements of school and community culture that are needed to get where we want to be. The enactment of the VTmtss Framework requires hard work, collective action and persistence. A focus on growth and on making progress toward ambitious goals requires a systemic and comprehensive approach with multiple interacting components.

The "Vermont Vignettes" at the end of the *VTmtss Field Guide* provide examples of how real Vermont schools are using the VTmtss Framework to address concerns and make decisions. Specific details have been modified slightly to both obscure their identity and to streamline or highlight specific issues. However, the brief narratives provide an accurate depiction of real problems and decisions. The Vignettes are intended to prompt thinking and support districts across the state.

PRACTICAL MATTERS

The practical matters related to taking action have, for the most part, been addressed throughout the *VTmtss Field Guide*. We highlight several here as a precursor to presenting the Vermont Vignettes, which create an opportunity to see and reflect on how real schools and districts are using the VTmtss Framework.

Competing Initiatives

Districts often need to develop, try out and evaluate several initiatives at once. The Technical Assistance Center on PBIS has provided a useful guide, which recommends using the multi-tiered system of supports to organize thinking about how various initiatives are aligned.[25] The most difficult aspects of aligning initiatives can be ameliorated somewhat by using the VTmtss Framework. The VTmtss in Action Reflection Tool is focused on helping you consider how each initiative or existing activity is related to components of the VTmtss Framework.

This type of thinking and analysis is not always easy to do but it can be extremely helpful. For example, as one middle school team was struggling to imagine taking on new work, one of the team members began to sketch the ways that some initiatives could actually inform and strengthen others (see Figure 8). In this case they used a Venn diagram. They began to see that the social-emotional work they were doing (left-hand circle) overlapped with the work they were doing to address and strengthen their academic outcomes (right-hand circle). This overlap of both initiatives highlights the role of engagement.

25 OSEP Technical Assistance Center on Positive Behavior Interventions and Support (2017).

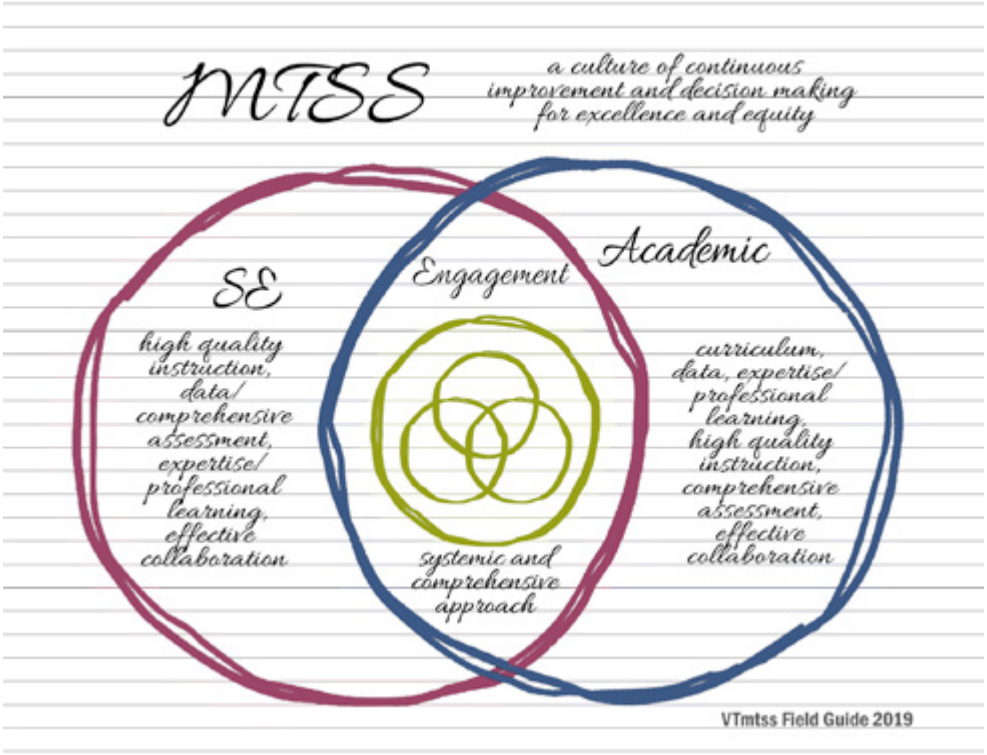


Figure 8 Conversational Notes from a Problem-Solving Team Meeting

As the team continued to unpack these ideas, they realized that there were further interconnections within the overlapping engagement area (note that there is a Venn diagram emerging within this figure). This is, of course, not the only way to envision these ideas, but it does illustrate that this kind of thinking can help participants appreciate how the efforts they are making in one area can help in another.

Often districts take on initiatives to respond to specific challenges without considering how these interact to support (or undermine) each other. Creating a visual of the points of intersection can be helpful.

Figure 9 An Idealized Vision of Interconnecting Components for a Complex System

Figure 9 shows a balanced diagram, with each component equally represented and all of the components informing key ideas in the center. Of course, contexts are variable and a district or school will rarely have allocated equal attention to each component. In that case, the Venn diagram would not reflect an equally balanced set of efforts.

The example in Figure 10 shows a district that has focused quite a lot of attention on Instruction and Intervention, including expertise associated with that component. However, much less attention has been attached to assessment or to building a big-picture systemic approach to VTmtss. Importantly, although much attention has been allocated to instructional expertise, the expertise related to other components is much less robust.

Figure 10 An Example of Current Status of Improvement Processes in One District

Using the analytic questions in the VTmtss In Action Reflection Tools available in 2020, a VTmtss leadership team can examine how each major initiative can help to identify priorities.

Identifying Priorities

Priorities are established as they relate to the most pressing decisions facing each school or district. Some examples of problems that require urgent action include:

- Student achievement at School A is above average compared to the rest of the state; however, there are significant and serious gaps between students of different socio-economic status.

- School B has a rate of referral and identification for special education that is much higher than the state average. Importantly, once identified, students do not generally demonstrate great improvement upon re-evaluation.
- In School C the number and severity of behavioral disruptions is making it difficult to provide a productive instructional environment.
- Teachers in School D find it difficult to address age- or grade-appropriate standards when some students are currently far from proficiency.

The appropriate balance of initiatives would not be the same for these diverse schools. However, the approach would include similar thinking:

- What is working?
- Do all professionals have what they need (training, support, resources, etc.) to enact the strategies we are using?
- Will introducing a change or a new initiative undermine any existing (and effective) strategies?
- Which professionals need to be involved in new work? Can it be phased in?

Responding to Unexpected Results

A key feature of continuous improvement is testing changes to see what happens in the real world. Rapid use of data to refine approaches and respond to new challenges can actually make professionals more likely to take risks. Nothing is more frustrating than continuing to employ an approach that has unearthed unintended consequences. Successful schools and districts will learn from what is working and adjust their practices to ensure that the goals they set will be met. The Comprehensive Needs Assessment toolkit from the Vermont Agency of Education[26] should be helpful here. In addition, the following may be helpful:

- Park, S., Hironaka, S., Carver, P., & Nordstrum, L. (2013). *Continuous improvement in education: White Paper*. Stanford, CA: Carnegie Foundation for Advancement of Teaching
- A Cycle of Continuous Improvement tool

In summary, the VTmtss Framework is not a thing "to do." Rather, it is a tool that helps districts organize their existing efforts to improve and enhance their work with all students. At the same time, it can help those districts identify opportunities for growth and plan next steps – within a coherent set of interrelated actions. When intentionally focusing on the interrelated, interconnected, and interdependent components of the VTmtss Framework, Vermont education systems will realize their own greatest potential to support all students in achieving academic and non-academic success.

26 Vermont Agency of Education (2019).

Vermont Vignettes

Using the VTmtss Framework to Make Decisions

The following vignettes are actual examples of how the VTmtss Framework applies to five Vermont schools as they address a specific priority. Each vignette was written by school personnel involved in the work. The use of the VTmtss in Action decision-making process illustrates how each school approached problem-solving and the identification of actions to support continuous improvement.

MCINTOSH ELEMENTARY: USING VTMTSS TO MAKE DECISIONS ABOUT INSTRUCTION AND INTERVENTION

"McIntosh Elementary School" is a PreK–3 school with 250 students that serves a largely white, middle class suburban population (37% Free and Reduced-price Lunch [FRL]).[1] While the majority of their students meet literacy benchmark standards at the end of grade 2 (average of 88%), many fewer pass the end-of-grade 3 national assessment. In addition, students in this school are doing slightly less well than their counterparts in the other PreK–3 schools in the district. Finally, there is a significant achievement gap throughout the district between students who are on FRL and those who are not.

Over the past two years, the district leadership has been focusing on increasing the rigor of the curriculum at all grade levels and ensuring that unintended variation across school sites is not resulting in inequities. The entire district has just completed a vigorous re-examination of its universal instruction in literacy and all teachers have been participating in professional learning opportunities to refine and enhance their classroom instruction. The district has also provided substantial support to its reading specialists who have been strengthening their early intervention practices using an evidence-based approach as they move toward adopting a multi-tiered system of supports. Realistically, however, students who might benefit from early intervention may not receive it as quickly as possible because specialist support teachers work with the most vulnerable students first.

The staff and leadership have identified the following concerns: (a) in general, our students are not doing as well on state assessments as we would like, nor as well as our local assessments suggest they should; (b) we have more students who need additional support (intervention) than we can serve with our specialist teachers; and (c) less affluent students are not doing as well as more affluent ones.

Review of Steps Taken. The VTmtss Framework was used to review what McIntosh School has done and where they might work to address the concerns they have identified.

1 Each of these Vermont schools has been given a pseudonym. Though the details of their circumstances are largely accurate, occasional non-relevant descriptors may have been altered slightly to ensure confidentiality.

Comprehensive and Systemic Approach:

+ Administration has created a culture of trust, support and shared leadership
+ Uninterrupted literacy block of 60+ min/day
+ Focus on high expectations for all students
+ Literacy expertise at both the school and district level
+ Articulated literacy curriculum and framework
+ Identified evidence-based approach to intervention for reading specialist
+ Organized, aligned and refined materials for both instruction and intervention

Effective Collaboration:

+ Grade-level teams work well together
+ Reading teacher helps teams analyze data and identify students who need additional support
+ School culture is productive and focused on collective effort

Judicious Development and Use of Expertise:

+ Specialist teachers (literacy, special education [SPED], Speech and Language Pathologist [SLP]) work well together and support classroom teachers through direct instruction, modeling and coaching
– New hires receive careful induction into core practices

+ Strength: School has done their work

– Weakness: School has work to do

High-Quality Instruction and Intervention:

+ Coherent and aligned literacy curriculum and framework of instruction
+ Expert literacy support at both district and school level
+ Good access to instructional materials
– Consensus regarding timing and alignment of curriculum – currently being addressed through monthly grade-level meetings
– Intervention is limited to students who receive additional (out of classroom) support

Balanced and Comprehensive Assessment:

+ Coherent and articulated local assessment system for K–5
+ Periodic benchmarks established and reviewed
+ Data analyzed quarterly (by school and district leadership)
+ Some concern about the validity of the local assessment tool vis-à-vis the state assessment
– In the past, there has not been a focus on using data to improve the system or to plan instruction for individuals
– Formative assessment data are not as robust as the periodic benchmark assessments and are not well-documented
– Comprehensiveness of the types of data is being questioned

Identify the Problem to be Solved. Most professionals at McIntosh have been addressing aspects of this work for several years. They have been accessing professional learning opportunities individually and in teams and have been open to taking on new challenges. They appropriately identified the need for stronger classroom intervention for students who: (a) were not meeting the assessment benchmarks, but who did not meet the criteria for receiving support from the reading specialist or (b) were seen as vulnerable even though they were near or at the benchmark. In addition, they wanted to more closely align the supportive instruction they offered in the classroom with the techniques and approach used by the interventionist.

Action. The entire staff received professional learning in the evidence-based intervention approach used by the interventionist (modified for the classroom). This included readings and discussions, modeling by an expert in the approach, and allocating time for problem-solving and troubleshooting in monthly grade-level meetings. Teachers also shared tips and collaborated in making additional materials specific to their students' needs and in line with their existing practices. In addition, the school initiated a "Fast Start" for grade 1 and 2 students who were known (through previous assessment) to be vulnerable or struggling. Those students received intervention support almost immediately from both classroom teachers and specialists.

Assessment. Continuous informal assessment data were used to refine instruction on a daily and weekly basis. This included quick checks on reading level, records of oral reading, and locally-designed assessments of phonics and sight vocabulary. Then, the data from the first quarter were analyzed carefully. Leadership was somewhat disappointed because the total percentage of students meeting or exceeding the benchmark was not significantly

+ Strength: School has done their work
– Weakness: School has work to do

different from earlier years. However, a closer examination of the data revealed that there were many fewer students who were at the lowest levels, suggesting that those students were benefitting from the change. In addition, it became clear that there was a need for some additional formative assessment of unassessed literacy skills.

Decision. Continue for another quarter and re-evaluate. School and district literacy specialists were charged with identifying and creating more nuanced assessments to be added before the end of the year.

BOULEVARD CENTRAL SCHOOL: USING VTMTSS TO MAKE DECISIONS ABOUT INDIVIDUAL STUDENT SUPPORT

"Boulevard Central School" is a PreK–8 school with 459 students that serves a population of students that is 95% white. Although its Free and Reduced-price Lunch (FRL) rate of 35% suggests a low rate of poverty, the students are socioeconomically diverse. On measures of achievement, student performance is lower at Boulevard than it is statewide for math, reading and science. On average, and across grades, fewer than 50% of all students are proficient in reading and even fewer are proficient in mathematics. In addition, there are a relatively large number of students identified as needing special education.

Faculty and staff have identified two priority concerns: (a) improve the performance of all students in reading and math and (b) reduce the number of students who are found eligible for special education by strengthening intervention and supports.

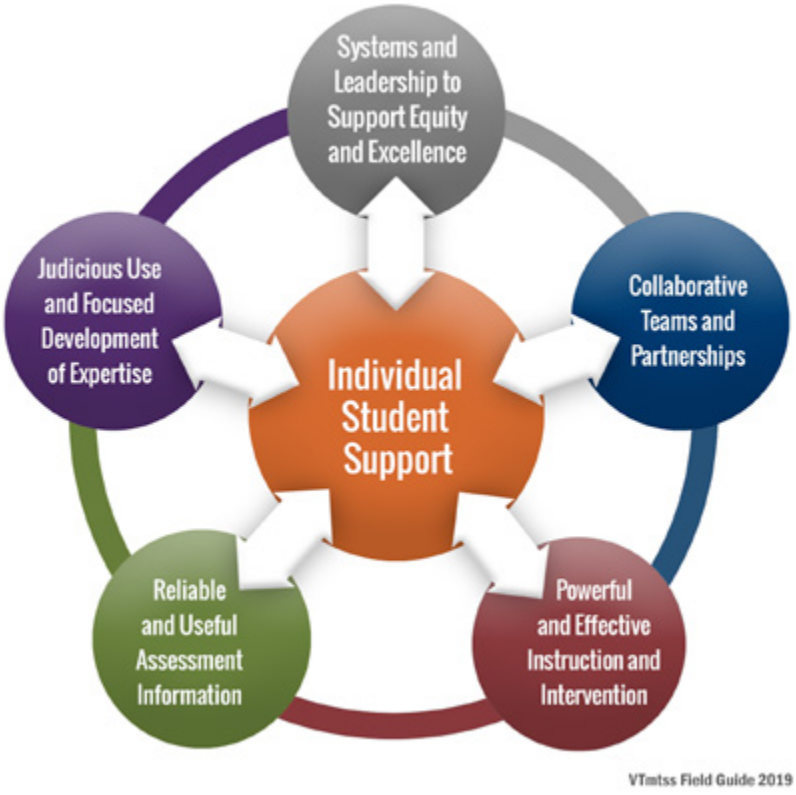
Faculty and administration began a serious change and improvement effort four years ago with an initial focus on two things: strengthening universal instruction and enacting a vigorous assessment system. Over the past 3 years, they have added a significant focus on early intervention in reading.

These efforts have been unusually successful. At grade 1, the percentage of students who meet or exceed the end-of-year benchmark in reading has risen from 61% to 93% and, at grade 2 from 69% to 91%. Over this period, there has also been a steady reduction in the number of students who are referred for special education. As a result, the staff have found that specialist teachers can now work with some students who may have not received support in the past.

Despite these efforts, there are a small number of students who require continuing consideration in terms of their layered support. Many of these are students with physical disabilities, significant developmental delay or impairment, or emotional difficulty. Each of these students has an Individualized Education Program (IEP) and their progress is regularly monitored and considered by the Educational Support Team (EST).

The decision facing them at this moment is whether Simon, a second grade boy, should be identified with a learning disability.

Review of Steps Taken. The VTmtss Framework was used to review what Boulevard Central School has done and where they might work to address the concerns they have identified.



Comprehensive and Systemic Approach:

+ Articulated literacy curriculum and shared commercial program
+ Curriculum mapping has created an alignment across settings
+ Uninterrupted literacy block
+ Literacy expertise at both the school and district level
+ Identified evidence-based approach to intervention for reading specialist
+ Focus on high expectations for all students
+ Organized, aligned and refined materials for both instruction and intervention
– Administrative stability (there have been 3 principals in 4 years)

Effective Collaboration:

+ Reading teacher helps teams analyze data and identify students who need additional support
+ District assessment coordinator supports teams to use data
– Effective collaborative teaming (this has been initiated but is still a work in progress)

Judicious Development and Use of Expertise:

+ Extensive embedded professional learning has supported teachers over the past four years
+ All teachers understand the data system and enter their own data

+ Strength: School has done their work

– Weakness: School has work to do

+ Specialist teachers are charged with working with the most challenging students
+ Teachers with specialized training and expertise provide tailored reading instruction, speech and language intervention, and special education programs
+ Professional learning for new teachers is provided by district specialists
– Turnover has limited systemic improvements
– Literacy, SPED and SLP are working toward coordinating to support classroom teachers through direct instruction, modeling and coaching

High-Quality Instruction and Intervention:

+ Coherent and aligned literacy curriculum and framework of instruction
+ Expert literacy support at both district and school level
+ Good access to instructional materials
– Not all staff are expert and there is a wide-spread use of paraeducators

Balanced and Comprehensive Assessment:

+ Coherent and articulated local assessment system for K–8
+ Periodic benchmarks established and reviewed
+ Data are analyzed quarterly
+ Formative progress monitoring is done weekly for students who are receiving intervention support
– Systemic analysis, interpretation and use of data provides meaningful information (this is a real struggle at some grade levels)

Identify the Problem to be Solved. The EST is considering the case of Simon, a grade 2 boy who has been in the school since kindergarten. It is evident that the hard work of the past four years is producing results for the school – and for students like Simon. While Boulevard is presently providing strong layered supports of increasing intensity, it needs to revisit its process for determining whether an individual student is eligible for special education services.

Action. The EST is using its review of the system in relation to Simon to determine his eligibility for special education services as a student with a learning disability.

Review of Instructional Experience and Assessment Records. Simon's kindergarten screening indicated very limited experience with print – he was able to identify just four letters. In addition, he was reluctant to communicate with adults. His kindergarten teacher was an experienced and capable teacher and Simon participated in the improved literacy program as well as some small group support provided by the SLP. He met the local end-of-kindergarten benchmarks, although he struggled with letter-sound blending. In grade 1, at the end of the first trimester benchmark assessment, Simon had made no progress and was still performing at the beginning of grade 1 level. Because the school had a robust system of data discussion regarding vulnerable students, he immediately began working with the reading specialist who was using the evidence-based intervention established for early grade readers. Over the next two months, both his formative assessments and the periodic benchmarks showed

+ Strength: School has done their work
– Weakness: School has work to do

marked improvement (see Figure 11). The EST met in Spring of grade 1 and decided that Simon's progress indicated that he was responding to instruction and intervention and that he was likely to meet the grade level benchmarks by early in grade 2 (see dotted line).

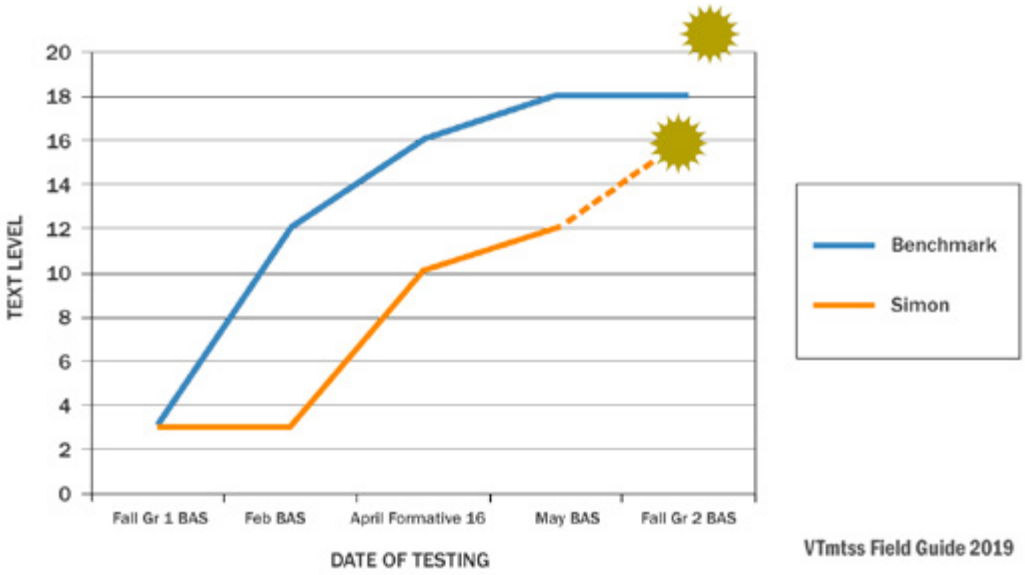


Figure 11 Progress Monitoring Data for Simon

During the fall of grade 2, Simon continued to respond to intervention and instruction. Weekly formative progress monitoring of taught skills and strategies indicated steady but slow growth. However, as the demands of more complex texts continued, Simon's progress slowed. While he was meeting the standards, he was very slow in reading and this affected his comprehension. Further assessment by the SLP suggested that he had some semantic weakness in more complex language functions.

The school has an excellent record of Simon's progress via both informal assessments (e.g., letter identification upon entering kindergarten, letter-sound blending at end of kindergarten, sight word acquisition and oral reading accuracy throughout grades 1 and 2) and more formal, structured assessment such as Fountas & Pinnel periodic benchmark assessments. They also have excellent documentation of his classroom instruction and the intervention he received (the reading specialist keeps weekly lesson plans and captures data on a weekly basis).

The classroom teacher and the reading specialist have been in continuous contact with Simon's mother, who was concerned about his slow progress. All of them were also concerned that the increasing demands of non-fiction texts and much greater amounts of reading in grade 3 were potentially problematic. They all agree that the EST team should consider whether Simon should be designated with a learning disability.

Decision. As the team reviewed its convergence of data from multiple sources[2] they concluded the following:

- Simon's difficulties were not the result of inappropriate instruction. He had received tailored instruction from expert teachers. Further, Simon is a native speaker of English.
- Other factors such as vision, emotional difficulties and cultural differences were not relevant in Simon's case.

2 See North Carolina SLD guidance.

- Simon, despite being provided with appropriate and tailored instructional experiences, was not achieving grade-level proficiency in reading.
- Simon *is* responding to intervention and instruction but his rate of progress is insufficient to reduce his risk over time.

Consequently, they determined that Simon should be eligible for ongoing special education services in order to prevent further adverse effect.

SPENCER HIGH SCHOOL: USING VTMTSS TO ADDRESS EQUITY AND EXCELLENCE AT THE HIGH SCHOOL LEVEL

"Spencer High School" is a relatively diverse suburban school that regularly outperforms the state average on measures of English Language Arts (ELA), math, and science. At the same time, they have a significant gap between the proficiency of more affluent and less-affluent students (as captured by Free and Reduced Lunch [FRL]) and also between students with and without disabilities. They have been actively engaged for several years in conversations about how to achieve equity and excellence using a multi-tiered system of supports.

With the introduction of Act 77, Spencer High School, like many other high schools in Vermont, has worked to build a system to include a four-year teacher advisory system, Personalize Learning Plans (PLPs), and proficiency-based learning. Administrators and staff in the school have attended professional learning opportunities to help guide their work within the school. The school has provided time during Professional Learning Communities (PLCs) and other school-based collaborative time to help staff build their knowledge of the different components of Act 77 so that students will be prepared to graduate in a proficiency-based graduation system. These PLC opportunities allow teachers and administrators to talk and collaborate across disciplines, and they also support collaborations with special educators and instructional coaches.

The school continues to build on their local assessment plan by adding to the standardized tests, such as Smarter Balanced Assessment Consortium (SBAC), with opportunities across the disciplines for students to participate in common assessments based on proficiencies that are project-based, performance-based, and personalized in nature. Within the different disciplines, especially ELA and math, departments have worked to align common assessments based on content and transferable skill proficiencies.

During the past year, Spencer High School launched intervention blocks for students needing support developing their ELA and math proficiencies. The educators within the intervention block are familiar with the proficiencies being addressed across different courses. However, they are struggling to create and manage a systemic approach to: (a) assess or gather information about students' current proficiency, (b) support student learning in content proficiencies, and (c) identify next steps for instruction. Additionally, educators in disciplinary courses and intervention blocks don't have common time to look at data and plan for students across different classes.

The school has worked to set up intervention blocks for students who have been identified through teams (Multtiered System of Supports [MTSS] and Special Education [Spec Ed]). However, content teachers in the universal setting have not received enough professional learning to feel comfortable in developing additional support and extension opportunities in the classroom. This is linked to the fact that there has also been too little professional learning in how to use formative and summative assessments of proficiencies to plan instruction for diverse students.

By using intervention blocks to provide additional learning opportunities, the school has set up a practice where some students have double the math and literacy time but decreased opportunity to access other classes like music, art, physical education and technology. Although the school has identified a way to provide additional instructional opportunities for students, they have also set up (unintended) inequitable practices where some

students must have double blocks of literacy and math while other students have opportunities for learning in other areas.

In addition, without the information from a viable progress monitoring system, students remain in the intervention block for *an entire year* instead of moving fluidly in and out of the intervention as needed. Spencer High School is also moving towards offering a call back time for students to provide opportunities for all students to access teachers for instruction beyond the classroom. Call back time will provide 30 minutes during the day where teachers may call students back for additional instructional opportunities or students may also reach out to teachers for support as well. However, at this time, beyond anecdotal evidence, there is not a system to track how often students and teachers are using this time as an opportunity for additional instruction and assessment.

Review of Steps Taken. The VTmtss Framework was used to review what Spencer High School has done and where they might work to address the concerns they have identified. As frequently happens, some of the steps taken have resulted in unintended consequences and highlighted new problems to be solved.

Comprehensive and Systemic Approach:

- \+ Administration has created a culture of trust, support and distributed leadership
- \+ Focus on high expectations for all students
- \+ Trainings for administrators and staff around Act 77 components (personalized learning, proficiency-based learning)
- \+ Scheduling has been proactive
- – There have been unintended consequences

\+ Strength: School has done their work – Weakness: School has work to do

Effective Collaboration:

+ Discipline teams meet regularly as a group and within course and grade-level groups
+ Instructional coaches are available to collaborate with disciplinary teams, course-based groups and individual teachers
+ Commitment to PLCs that focus on identified professional learning needs
– School culture is focused on collective effort

Judicious Development and Use of Expertise:

+ Specialist teachers (consulting teachers and instructional coaches) work well together and support classroom teachers through direct instruction, modeling and collaboration
+ Extensive embedded professional learning regarding Universal Design for Learning (UDL)
+ Professional learning for all staff is available through PLCs

High-Quality Instruction and Intervention:

+ Expert instructional support at both district and school level
+ Access to universally-designed instructional strategies through PLCs, coaches and department time
– Alignment of disciplinary courses and start of a framework of universal instructional practices – just beginning
– Intervention *supplements* but does not supplant classroom experiences – students only receive additional (out of classroom) support at this time and it limits other options
– Intervention is responsive to ongoing progress monitoring

Balanced and Comprehensive Assessment:

+ The beginnings of developing a robust local assessment plan with screeners and standardized assessments to track some cohort performance Data around common assessments within courses are analyzed quarterly using protocols
– Local assessment plan provides data for all of the learners and can be used to make instructional (and placement) decisions
– Need for other continued development of common assessments, including appropriate formative, diagnostic and progress monitoring assessments for adolescent learners

This review led Spencer High School to identify two possible and interconnected problems to be addressed:

1) Students who receive intervention in math and literacy do so during an extra block during the day, which means that they do not have the opportunity to take classes that other students do, such as music, art, physical education and technology.
2) This model assumes students will need continuing support. Students are required to stay in the intervention block for the entire year instead of being able to move fluidly in and out of it as data shows growth and need through the different proficiencies. Because there is no robust plan to use data to monitor progress there is no mechanism for releasing students from intervention nor a process for modifying instructional supports to focus on specific proficiencies. Finally, while one small cohort receives intervention opportunities, others, who might benefit from support, cannot be accomodated.

+ Strength: School has done their work

– Weakness: School has work to do

Action: The school has acknowledged that these problems will require a systemic multi-step process over a series of years to truly develop a more comprehensive and equitable approach and to develop practices for providing instruction and intervention – to both support and extend learning opportunities for all students. The first step for Spencer High School is to begin to understand the problem more thoroughly. This year, they will:

- track data from students who are currently engaged in the intervention block;
- identify the proficiencies being addressed within the block and describe the instructional practices and assessments being used to monitor students' progress;
- develop an assessment system to provide: (a) pre-assessment data prior to the start of a proficiency unit, (b) ongoing formative assessments during instructional time, and (c) summative assessment at an endpoint to provide data about learning progress for all students;
- use this classroom system to identify any students who require additional opportunities for instructional support;
- work to identify and develop extension opportunities for all learners so that students can continue to extend their learning based on their progress; and
- investigate how other schools use call back time locally in Vermont as well as in other schools outside of Vermont to develop a plan that will help support students on their path to proficiencies.

Decision: Spencer High School will monitor the progress of the action steps over the semester. Those who have been charged with investigating data connected to the classroom and intervention blocks will share their findings and work to develop a consistent plan to support all learners for the upcoming year. Possible actions include the absorption of the intervention block into the classroom or a more fluid way to provide access to intervention for students who need it. Administrators and teacher leaders who are investigating possibilities for the call back time will use the semester to research and come together to share ideas and develop a plan for the upcoming year that will work to support all learners.

BIRCHWOOD SCHOOL: USING VTMTSS TO IMPROVE MATHEMATICS PERFORMANCE

"The Birchwood School" is a PreK–5 school with 300 students that serves a primarily middle-class population (30% Free and Reduced-price Lunch [FRL]). Ten percent of the school population receive English Learner (EL) services and students come from many countries representing 10 different languages. The population of the school is often in flux, with many families moving into or out of the district.

The faculty at Birchwood has identified student performance in mathematics as a matter of concern. The district and school leadership felt that there was a "need to do something about students who struggle with mathematics." Student math performance in the school remains among the lowest in both their district and throughout the state. As they began their work, just 18% of fourth and fifth graders were meeting the mathematics benchmarks on statewide tests. Of the 300 students at Birchwood, 13% receive Special Education (Spec Ed) services, a percentage that represents a rising trend.

Over the past two years the staff have been focused on the development and launch of an intervention program, with a goal of identifying and supporting students who may benefit from it. During the first two years of the intervention program, data were collected and analyzed. The data included pre- and post-tests from units of study in the regular classroom, standardized test results, and informal data from the intervention classroom (e.g., scores from skill-based quizzes). Additionally, intervention instructors documented proficiencies and standards addressed during intervention and observed students in both the regular classroom and the intervention classroom. Finally,

surveys were frequently sent to intervention teachers, to regular classroom teachers, and to students. Less frequent surveys were sent to parents of students receiving intervention.

Last year, the school district invested in new resources for mathematics, purchasing a new commercial core program more closely aligned to standards. Teachers were provided with three days of training in how to use the new program. The school-based mathematics leader provided additional support as teachers implemented the new program. Over the past two years, the district has provided periodic in-service training for its teachers, focused on effective instruction of mathematics and has assigned mathematics coaches in its schools.

The most recent assessment results suggest that there has been some improvement in overall mathematics achievement for students at Birchwood, with 26% of the students meeting the standard. While encouraging, this is still dramatically lower than the district average. At the same time, the math intervention has not resulted in significant improvement for the most vulnerable students.

Review of Steps Taken. The VTmtss Framework was used to review what the Birchwood School has done and where they might focus their work.

Comprehensive and Systemic Approach:

+ Administration has created a culture of trust, support and distributed leadership
+ Professional learning opportunities are available for both teachers and paraeducators
+ District has provided funding for a math coach and several math specialists
– Schedules have been examined and revised to provide for collaborative time to analyze data and consult among professionals

+ Strength: School has done their work – Weakness: School has work to do

Effective Collaboration:

+ There is a congenial learning community
+ Instructional coaches available to support teachers
– There is a commitment to Professional Learning Communities (PLCs) with a focus on identified professional learning needs
– Coordination among and across grade-level teams regarding curriculum, standards and intervention

Judicious Development and Use of Expertise:

+ Specialist teachers (coaches and math consultants) work to support classroom teachers and interventionists
+ Professional learning for all staff is available
– Intervention for the most vulnerable students is provided by the most expert professionals

High-Quality Instruction and Intervention:

+ Implementation of a core math program for all grade levels
+ Expert instructional support at both district and school level
– All teachers have requisite knowledge and skill to teach mathematics
– The most vulnerable students are taught by expert professionals
– Existing practice(s) are resulting in an improvement in student performance

Balanced and Comprehensive Assessment:

+ Reliance on state-level data
+ Increasing use of formative assessments to identify the most common areas of difficulty and address curricular needs
– A robust local assessments provide effective screening, monitoring and evaluation information to plan instruction and track performance)
– Assessment of the systemic approaches is used to evaluate program success

Identify the Problem to be Solved. The faculty and leadership at Birchwood identified several challenges that may be impeding their students' achievement.

Systems and Leadership:

1) Communication among intervention faculty, special educators and regular classroom teachers is difficult and is limited to informal conversations that occur during lunch, recess or other free time. This results in a disjointed instructional experiences for the students needing the most support.
2) Test scores are low, with a significant gap between those students receiving free and reduced lunch and those not. With a focus on skill development and a general "memorization over conceptual understanding" approach, students receiving free and reduced lunch may not be receiving the conceptual instruction they need.
3) There are more students referred for intervention than can be served by the intervention center's two teachers.
4) Inconsistent beliefs about and expectations for *all* students.

+ Strength: School has done their work – Weakness: School has work to do

Collaboration:

1) There is little genuine collaboration – about students, about data or about professional practice.
2) As noted above, the system does not support more engagement and problem-solving.

Powerful & Effective Instruction and Intervention:

1) See systems above.
2) Stronger universal instruction is needed to support all students and reduce (over time) the number of students who are most vulnerable.
3) Continuing professional learning and coaching support are needed.

Reliable and Useful Assessment Information:

1) There is no screening tool available to assess students for intervention or to identify underlying misunderstandings.
2) Generally, there are no assessments that allow the instructors to assess their students' understandings, misunderstandings and pre-conceptions. With a reliance on "right vs wrong," instructors don't have a clear picture of the underlying misunderstandings or understandings from which to build their instruction.
3) There is limited data for monitoring students' progress and adjusting instruction or making judgments about programmatic effectiveness.

Expertise:

1) The delivery model for intervention relies on paraeducators. While they have received supportive training, the paraeducators tend to focus on three main ideas while creating their plans for the intervention center:
    a) skill development,
    b) a review of the current mathematics from class and/or
    c) homework completion.
2) Classroom teachers are beginning to acquire additional skills that should improve universal instruction.
3) Teachers are only beginning to be able to recognize recurrent misconceptions or understandings that can be addressed during instruction.

Action. Teachers recognize the need for improving universal math instruction for *all* students (given the very low percentage of students experiencing success at Birchwood). As well, there is a need to develop a systemic approach to refine the intervention block: addressing its ongoing development and the challenges that arise as intervention becomes a regular and necessary component of instruction.

Decision. As a result of formal and informal data collected and analyzed over the prior two years, Birchwood Continuous Improvement Plans is built around the following actions:

Strengthen Universal Mathematics Instruction. The district and school plan to:

- have all faculty attend and participate in workshops held during monthly half-day release time;
- provide professional learning (courses) to all K–2 teachers, special educators and EL teachers in principles of early numeracy and in using an assessment tool for screening;
- bring a school-based mathematics course to the district for the purpose of helping teachers build confidence in their own understanding of mathematics by making connections among algebra, geometry and arithmetic and to reinforce the notion that mathematics *is* problem-solving.

Institute Professional Learning Communities (PLCs). Through twice-weekly PLCs, educators, specialists and paraeducators will coordinate instruction, develop approaches that support conceptual learning, and discuss specific student needs. Additionally, PLCs will provide a venue for discussions about research on teaching and learning. During the first year of PLCs, a focus will be on looking at student work so as to understand progressions of learning.

Strengthen the Intervention Supports. Develop an articulated intervention curriculum that focuses on the large, overarching mathematical ideas of additive, multiplicative, fractional and proportional reasoning. As the school moves towards adopting a multi-tiered system of supports, special educators and interventionists will strengthen their practices to include a more conceptual approach to mathematics. The intervention center will move away from being a place where homework is completed, or where students are sent when they struggle with the day's concept in class and will, instead, focus on conceptual instruction. District leadership is also analyzing possible ways to move away from an intervention that rests on the use of paraeducators.

Support all students. Birchwood School is currently referring more students to intervention than can be served by its two instructors. Through an improved screening tool, it is expected that many students currently referred to intervention will be better served through classroom-based interventions focused on building underlying mathematical skills (e.g., place value).

As an initial action, the district has agreed to add a licensed teacher to the intervention team. That teacher will analyze student understanding on assessments – as opposed to right vs wrong – and work with classroom teachers to develop classroom-based approaches that allow all students the support they may need. The intervention classroom will be for targeted support in the large overarching mathematical areas. Through creative scheduling which is already in place at Birchwood, students needing intervention will receive it as needed. Some may need short and brief instruction in a particular area, while others may need more constant support from the intervention classroom. Through an improved screening tool and a more focused intervention curriculum, all students will be supported.

Assessment System. Birchwood School is continuing to fine tune its assessment system. For the last two years, Birchwood collected student data from unit pre- and post-tests, skill-based quizzes and tests. The data collection was helpful in identifying a student's ability to get a correct answer but not very helpful in identifying underlying conceptual misunderstandings.

Birchwood intends to convene a group of educators to develop an assessment that allows insight into student understanding of the large overarching mathematical ideas of additive, multiplicative, fractional and proportional reasoning. These mathematical themes permeate all strands of mathematics, and underlying difficulties will affect learning considerably. In addition, there is a need to identify and create common assessment tools for monitoring students' progress on a regular schedule.

Focus on Continuous Improvement. Birchwood School will continue to collect formative and summative data and to monitor progress related to the action steps over the next school year. Administrators will include a discussion item related to the action steps on the agenda for each staff meeting throughout the year. A small budget is available to support educators as they implement the action plan (e.g., consultant support or workshop training). The intervention instructors will contribute to PLC discussions by sharing evidence of student understanding from assessments and from classroom-based work. PLC leaders will keep the focus on supporting all learners.

District leadership and Birchwood's faculty understand that this is a multi-year plan and that refined goals and actions will emerge. This new, more coherent and coordinated approach to improving students' mathematics knowledge and skills has motivated professional staff to look more closely at student understandings and is already forging a sense of shared commitment.

MOUNTAINTOP ELEMENTARY: USING VTMTSS TO ADDRESS SOCIAL-EMOTIONAL FUNCTIONING AT THE ELEMENTARY LEVEL

Mountaintop Elementary is a small K–4 school located in rural Vermont. It has a student population of 280 and 54% Free and Reduced-price Lunch (FRL). The professionals in the school have become concerned about students' social-emotional well-being and their knowledge and skills related to self-regulation. There are a number of teams that review social-emotional programming on a systemic and individual level. The Behavioral Support Team is dedicated to reviewing all quantitative and formative data on the individual student, classroom, grade-level and school-wide basis. Faculty have also participated in trainings targeting understanding behavior, engaging students in behavior planning, and educational equity.

Review of Steps Taken. The Behavioral Support Team met to identify trends and suggest action steps be taken to better address social emotional functioning at Mountaintop Elementary. First, analysis of individual student data suggested that a small number of children were really struggling with anger management and oppositional behavior. These behaviors were quite extreme and explosive – inside and outside of the classroom – and caused disruption to the academic progress and social connections of these individual students and their classmates. Second, when the Behavioral Support Team met with faculty to explore their formative impressions of the data, another trend emerged. In addition to those students who displayed intense emotional reactivity, there were a number of students who struggled with the same issues but to a more subtle degree. Their behaviors often were contained in the classroom and included withdrawing from work, getting frustrated or not being able to manage these behaviors and return to academic activities. While the behaviors in this group were less intense, they also detracted from the students' own learning and that of their peers. In addition to student data, faculty examined current approaches to addressing these patterns and found that, although similar tools being employed, there was a great deal of variation across settings in how they were being used.

Professionals at Mountaintop Elementary wondered if students had enough skill to manage and regulate their own behaviors. It appeared that their existing approaches were not addressing these identified problems with enough efficacy. The faculty decided that they needed a common language for their social-emotional work and this led them rather quickly to realizing that they need to embark on a school-wide effort to adopt a universal intervention model targeting positive social-emotional development.

Action. The Behavioral Support and Leadership teams collaborated on conducting a review of possible intervention models to target emotional regulation strategies. The combined group also reviewed the interventions that were currently being used by classroom teachers. Several faculty members were piloting a manualized intervention targeting emotional regulation.[3] The leadership group researched this intervention and determined it to be a viable school-wide option.

Next, the intervention model was presented to the whole faculty with testimonials provided by those who had been implementing it. Classroom data was also shared to illustrate the impact it had made in those classrooms. The faculty discussed the benefits and drawbacks of using the intervention and agreed to adopt it systemically, using it initially for students with intense needs. A critical perceived benefit was having a consistent vocabulary regarding emotional regulation that could be used by the faculty and students and shared with families.

3 For a discussion of manualized approaches to intervention, see Goldstein, N. E. S., Kemp, K. A., Leff, S. S., & Lochman, J. E. (2012). Guidelines for adapting manualized interventions for new target populations: A step-wide approach using anger management as a model. ***Clinical Psychology, 19***(4), 385-401.

Comprehensive and Systemic Approach:

+ Administration has supported the development of teams to regularly review data
+ Administration has stressed a school-wide understanding of the relationship between social emotional functioning and learning
+ Trainings were prioritized for administrators and staff around social-emotional learning and models of regulation
+ The process of problem definition, data review and solution identification was done as a collaborative process between administration and faculty

Effective Collaboration:

+ Discipline team meets regularly as a group and shared information with both Leadership and the PBIS team
+ Instructional coaches are available to collaborate with all teams and individual teachers
+ Commitment to PLCs that focus on identified professional learning needs
+ School culture is productive and focused on collective quality improvement

Judicious Development and Use of Expertise:

+ Specialist teachers (consulting teachers and instructional coaches) work well together and support classroom teachers through direct instruction, modeling and collaboration

+ Strength: School has done their work

– Weakness: School has work to do

+ High visibility of many aspects of the intervention leads to natural opportunities for modeling and feedback
+ Professional sharing of knowledge and expertise is used to inform decisions
+ Professional learning for all staff is available through Professional Learning Communities (PLCs)
+ Intervention model piloted in some classrooms to provide immediate feedback and support for teachers initiating use of intervention for the first time

High-Quality Instruction and Intervention:

+ Expert instructional support at both district and school level
+ Access to universal designed instructional strategies through PLCs, coaches and department time
– Instructional strategies are used universally and with integrity
– The plan for establishing and maintaining fidelity will need to be outlined
– A system for determining need and implementing the social-emotional framework for intervention in tier 2 and tier 3 will need to be clearly articulated

Balanced and Comprehensive Assessment:

+ A consistent data system in place to review behavior and social-emotional functioning on an individual and school-wide basis
+ Data reviewed by an identified team on a weekly basis
+ Decision-making and continuous performance review takes quantitative and qualitative or formative classroom data into account

Decision. The faculty decided through consensus to adopt the intervention model. Once that decision was made, the Leadership Team designed a plan and a timeline for training all staff. The supporting materials were used as decorations in hallways and other public areas to promote use. The school is in the process of getting all faculty trained in the model and designing regulation tools for classrooms (e.g., quiet spaces in each classroom like a calm down cave and sensory baskets) and common areas (e.g., hallway yoga circuits and specific strategy posters).

The effectiveness of the model will be determined by school-wide data (out of class and in class) and formative data from the classrooms. In addition, specialist support staff are considering how frequently they need to reteach strategies. There is a sense among faculty that this initial work has begun to create a cultural shift: a move to become more trauma informed, to normalize struggles, use available skills and tools, and then move on.

+ Strength: School has done their work

– Weakness: School has work to do

Reflection Tools

The framework presented in the *VTmtss Field Guide* articulates a complex integration of overlapping ideas, multifaceted systems, and a strong emphasis on the unification of efforts to support the success of all students. As educators work to improve their VTmtss Framework, it is useful to have examples and tools to encourage and promote deeper thinking about the specific components in VTmtss as they exist within the context of their school or district. It is for this reason that the following six reflection tools were developed, one for each component and one for VTmtss in Action. When used in tandem with the VTmtss Self-Assessment tool, the goal is to provide a school or district with a clear process and the evidence necessary to address the identified priorities in their continuous improvement plans using VTmtss.

Wherever possible, the reflection tools were designed to emphasize the integrated nature of the components and how they interact with each other in a comprehensive system. Due to the complexity and importance of the High-Quality Instruction and Intervention and Comprehensive and Balanced Assessment components, these reflection tools look specifically at their own elements not in relation to the other components. The open ended and yes/no prompts in the reflection tools encourage educators to think deeply about how the elements and characteristics of the component present within their school or district. Each chart is then followed by a set of guiding questions to help identify what strengths and opportunities exist, what the broad understandings are and to articulate issues that need to be addressed.

Suggestions for completing the Reflection Tools:

1. Read the *VTmtss Field Guide*.
2. Determine if this is a school level or district level review. If district, please ensure that there are diverse representatives from across the district.
3. Identify the team/group of individuals who will participate in the reflections. Multiple perspectives from various stakeholders will provide the most comprehensive understanding of the component.
4. Allocate the time necessary for deep thinking and discussion. Consider multiple sessions to accomplish each reflection.
5. Be clear on how this data will be collected and stored.
6. Use the data from the reflection tools to create summary statements for the VTmtss Self-Assessment.

Reflection on a Systemic and Comprehensive Approach

Directions: Use the chart below with the information in the *VTmtss Field Guide* Component 1 to help you focus your attention on critical features of a systemic and comprehensive approach to VTmtss. It includes questions to prompt overall self-reflection and evaluation regarding critical responsibilities of a systemic and comprehension approach, (1) to establish and monitor culture and vision and (2) to acquire and allocate resources. For best results, please do the following:

- Consider the extent to which each of these is part of your existing systemic approach. Wherever possible, provide examples and evidence to support your judgments.
- Use the guiding questions below the chart to make your conversations meaningful.

	Establish and Monitor Culture and Vision	Acquire and Allocate Resources
Effective Collaboration	• What is the strength of our collaborative culture? • How do we ensure time and training for effective collaboration?	• Collaboration requires time and expertise – how do we support this? • How do we remove barriers to collaboration between and among different professionals?
High-Quality Instruction and Intervention	• Is there a wide-spread culture of instructional excellence and engagement? • Have we identified and provided professional learning, materials and support for high quality instruction and intervention? • Do our schedules support our vision and goals?	• Do we have the expertise and resources to perform at the highest level?
Comprehensive & Balanced Assessment System	• Do we have a meaningful culture of data-informed decision-making? • Across the district do we have a comprehensive and balanced assessment system capable of providing useful and trustworthy information about all students? • Do we use an appropriate platform for capturing and analyzing data?	• Have we invested in excellent assessment systems that generate the information we need? • Have we provided the professional learning to ensure that all relevant professionals can use assessment information to improve practice?
Expertise	• Do we have a culture that builds expertise? • How have we identified and used available expertise needed for VTmtss? • Do we develop, support and promote excellence and growth among all professionals?	• Are we encouraging and promoting flexible use of expertise? • Do we develop or employ additional expertise where needed? • Do we make sure that our most vulnerable students are supported by our most expert professionals?

	Establish and Monitor Culture and Vision	Acquire and Allocate Resources
Continuous Improvement & Decision-Making	• How does our culture support continuous improvement and decision-making for excellence and equity? • Have we become knowledgeable about and fluent in using a continuous improvement approach to problem-solving? • Do we use data from the entire Framework to support systemic decision-making? • Do we integrate and coordinate initiatives to strengthen outcomes?	• How do we consider each component of the VTmtss Framework in our decision-making processes? • How have we identified resources needed to strengthen or enhance our ability to identify appropriate actions and make good decisions?
Overall, what are the strengths and opportunities in our Systemic and Comprehensive Approach		

GUIDING QUESTIONS

1. Do we have a comprehensive and systemic approach to VTmtss? At the district level? Across each of the schools?
2. Is there one or more component(s) of the Framework that represent significant strength?
3. Is there one or more component(s) of the Framework that requires attention?
4. Does our system generate equitable outcomes for all students?
5. Do we have a clear idea about leadership for these systemic responsibilities?

Reflection on Effective Collaboration

Directions: Use the chart below with the information in the *VTmtss Field Guide* Component 2 section to help you focus your attention on critical features of effective collaboration. It includes questions to prompt overall self-reflection and evaluation regarding two critical responsibilities at the foundation of effective collaboration for VTmtss: (1) cultivating a collaborative culture and (2) establishing and monitoring effective collaborations. For best results, please do the following:

- Consider the extent to which each of these exists in your district or school. Wherever possible, provide examples and evidence to support your judgments.
- Use the guiding questions below the chart to assist in making your conversations meaningful.

	Cultivate a Collaborative Culture	Establish and Monitor Collaborations
Systemic and Comprehensive Approach	• Do we have relational trust and mutual respect among all? • What is the mental model or vision for success for all students and how is it shared? • How do we encourage the collaboration of all stakeholders, including families and communities for the success of all students? • What are the expectations for educators and staff in working collaboratively to address academic, behavioral and social-emotional issues? • How does leadership support and allocate resources for collaborative work?	• Do we have an effective leadership team? • How do we balance purposes (instruction, problem-solving and professional learning) across our collaborations? • How do we ensure that our collaborative arrangements include a range of perspectives – educators, students, families and community members – appropriate to the focus? • Do we have a system for communicating the work of our collaborations to the broader school or district community? • Do we have a system for monitoring the effectiveness of our collaborations?
High-Quality Instruction and Intervention	• Do collaborations support instructional engagement and excellence? • How effective is our collaboration in choosing evidence-based instruction and intervention strategies for use across classrooms and settings? • How do general and special educators collaborate to ensure that each student receives expert teaching, appropriate levels of support, and careful monitoring of their progress across settings and time? • Are staff roles and responsibilities fluid, to allow for alignment of expertise with specific student and staff needs?	• Do we have collaborations that articulate and align curriculum, instruction and assessment for academic, behavior and social-emotional learning? • Do we have collaborations that support vertical and horizontal alignment of instructional approaches? • What is the process that teams use to examine instruction and intervention practices to ensure that they are equally effective for all subgroups of students? • How effectively does our Educational Support Team (EST) process and address the needs of all students experiencing difficulty? • How do we support collaborative instructional arrangements, such as co-teaching? • How do we support mentorships and peer and instructional coaching? • How do we support effective student collaborations in classrooms? • How do we provide our students with opportunities to collaborate with appropriate experts to inform personalization of learning?

	Cultivate a Collaborative Culture	Establish and Monitor Collaborations
Balanced and Comprehensive Assessment	• How do our collaborations use a range of appropriate data to solve problems and make decisions aimed at maximizing learning?	• Who determines what data will be collected and how it will be stored and accessed? • Do we have a clearly identified team that meets regularly to examine and analyze system-wide data to monitor all students' progress and identify trends for academic and behavioral decision making? • Do we have a clearly identified team staffed with the appropriate expertise to identify students who need closer monitoring and (potentially) interventions? • How do we support and provide the time for collaborations that review and analyze district and school data and purposefully communicate information with other teams and partnerships?
Expertise	• Is a growth mindset foundational to our actions and beliefs? • How do we ensure that we build the knowledge and skills needed to be productive contributors in collaborative problem solving in our school or district? • How do we support people in knowing how to collaborate?	• What systems are in place that allow us to assess the expertise that exists in our school or district and determine strengths and gaps in relation to students' needs? • Who is involved in determining and planning high-quality professional learning aimed at improving the student learning in our context?
VTmtss in Action	• Do we support a collective focus on continuous improvement and decision-making for excellence and equity? • What actions and decisions do people in leadership roles exhibit that support the values and behavior needed for continuous improvement?	• How do we collaborate to consolidate information and align innovations to determine productive areas for action? • How is information from across the system used to solve problems and make decisions collaboratively? • How does our system support authentic and substantive collaboration that helps students, staff and families?
Overall, what are the strengths and opportunities in Effective Collaboration		

ANALYZING THE INFORMATION IN THIS REFLECTION:

1. What is the strength of our collaborative culture?
2. How do our collaborations focus on equitable and improved outcomes for all students? Do they rely on data to inform their work?
3. Within each component, which elements of our collaborative culture need attention?
4. What are the collaborative arrangements needed for successful VTmtss in our school or district?
5. Which existing collaborations require attention? What might they need?
6. What collaborative structures do not yet exist? For which purposes?

Reflection on High-Quality Instruction and Intervention

Directions: Use the chart below with the information in the *VTmtss Field Guide* Component 3 to guide your reflection on how your instruction and intervention ensures access and equity for all, provides a system of supports, is aligned and coordinated, and allows for responsive decision-making. The chart highlights those elements through the lens of the three assumptions detailed in the Instruction and Intervention component. For best results, please do the following:

- Consider each assumption through the lenses of access and equity, layered supports, alignment, and decision-making. Identify the strengths and opportunities that exist.
- Review Tables 2, 3, and 4 in Component 3: High-Quality Instruction and Intervention for specific details on each assumption.
- Use the guiding questions below the chart to articulate overall strengths and opportunities.

	Assumption 1: Excellence Starts with High Quality Universal Instruction for All Students	Assumption 2: Academics, Behavior and Social-Emotional Well-being are Intertwined	Assumption 3: Students are Provided Effective Interventions and Layered Supports	Notes, comments, identified actions
Ensures Access & Equity for All Students				
Provides a System of Layered & Tailored Support				
Alignment & Coordination across settings				
Responsive Decision- Making				
Overall, what are the strengths and opportunities for each Assumption				

GUIDING QUESTIONS

1. Do we have a commitment to high-quality, universal instruction that is evident?
2. Do we provide instruction and support for positive outcomes in academics, behavior and social-emotional well-being?
3. Are the objectives for behavior and social-emotional learning embedded in academic work and vice-versa?
4. Do *all* students have access to high-quality instruction and supports?
5. Do we generate equitable outcomes for all students?
6. Is our instruction and intervention responsive to and tailored for our students?

Reflection on a Comprehensive and Balanced Assessment System

Directions: Use the chart below with the information in Component 4 to make judgments about the extent to which your assessment system embraces the critical elements which support a high-quality multi-tiered system of supports.

- Consider your assessment system through the lenses of culture, balance and comprehensiveness as it relates to the what, why, who and how in your school or district. Table 4 provides additional resources that can support your reflection.
- After reflecting on these elements, use the guiding questions below the chart to identify overall strengths and opportunities.

	What? Outcomes, Values, Opinions, Practices	Why? Purpose	Who? Creators and/or Users	How? Method and Type
Culture of Data-informed Decision Making	• How does our context and culture value the use of data for making decisions? • How do we focus on using assessment information to improve instructional practices and outcomes? • How do we ensure that we provide a range of trustworthy and relevant data? • How accessible is our data to support data informed decision-making?	• How have we organized our system so that assessments focus on improving social-emotional, behavioral and academic outcomes for all students? • How do we use our assessment system to reveal unknown or unexpected opportunities for improving outcomes? • How have we made administration, faculty, students and parents aware of the value and use of assessment purposes and sources?	• How do we ensure that there is a shared and distributed responsibility for collecting and using assessment information? • What structures and commitments are in place for collaborative discussion and use of data? • How have we ensured that diverse audiences have the assessment information they need and use? • What systems are in place so that all users and stakeholders collect, examine, analyze and use data appropriately to solve problems and make decisions?	• How do we ensure that there is a range of assessment methods and types appropriate for different domains and diverse student groups? • How do we ensure that our assessment process is inclusive of diverse participants, students and parents? • How and where do we include the use of formative assessment practices in our system?

	What? Outcomes, Values, Opinions, Practices	Why? Purpose	Who? Creators and/or Users	How? Method and Type
Comprehensive	• Do we collect all the data needed to support decision-making about students, structures, instruction, and resource allocation? • How does our assessment system represent the range of information we want to capture?	• What do we do to ensure that our system intentionally collects and uses data for diverse purposes? • What data do we collect around student outcomes and about the culture and system that yielded it (e.g., the efficacy of collaboration, the strength of professional learning and leadership)?	• How is our system organized to provide data to multiple audiences and different users – including information from both "inside" and "outside" the school or district?	• Does our system provide multiple sources of data to improve reliability? • Does our system use diverse types of assessment information to provide a more valid (complete) picture of student outcomes or systemic components?
Balanced	• Does our assessment system represents an appropriate balance of information about all critical domains, content, and/or systemic components?	• How is our system reflective of the types of decisions we need to make? • What processes do we engage in to analyze and interpret areas of strength and opportunities for growth?	• What do we do to ensure that key users have appropriate, useful information? • How do we examine the system to ensure that "internal" and "external" interests are reflected appropriately?	• How do we ensure that the system acknowledges that no single assessment captures all important aspects nor all important outcomes in every domain? • How do we provide for a balance of performance assessments and on-demand assesments?
Overall, what are the strengths and opportunities in our assessment system				

GUIDING QUESTIONS

1. Does our reflection reveal areas of strength and opportunities for development in the assessment system? What are they?
2. Are there assessments of specific standards, proficiencies or systemic practices that can or should be strengthened?
3. Do we have a clear process for identifying, assessing, analyzing and interpreting data for those students who are struggling?
4. How can we use our assessment system as we consider specific questions or problems?
5. Across our district, who is involved in identifying, collecting, analyzing and interpreting data? How coordinated are those efforts?

Reflection on Expertise

Directions: Use the chart below with the information in Component 5 of the *VTmtss Field Guide* to help you focus your attention the system of expertise that exists in your school or district. It includes questions to prompt overall self-reflection and evaluation regarding two critical elements of expertise in an effective VTmtss: (1) a growth mindset and (2) a system of expertise.

- Consider the extent to which each of these exists in your district or school. Wherever possible, use examples and evidence to support your judgments.
- Use the guiding questions below the chart to deepen your understanding of the role of expertise in your district or school.

	Culture of Expertise: Growth Mindset and Professional Learning	A System of Expertise
Systemic and Comprehensive Approach	• How does the system encourage a growth mindset and professional learning to build expertise? • How does the system examine and respond to the needs for various expertise necessary for continuous improvement? • How do individuals (educators and students) access a breadth of experts and expertise to support their learning? • How does the system cultivate the knowledge, skills and dispositions needed to become more expert in each component? • How does the system embed a growt mindset into organizational initiatives?	• How is academic and social emotional learning expertise developed, supported and acquired? • Are roles and responsibilities examined regularly to ensure the appropriate expertise resides in the school or district? Who does this? • How does the system ensure that there is expertise for developing, maintaining, and supporting school and district systems and structures? • Are policies, structures, and schedules implemented and resourced to allow for appropriate expert participation? How so?
Effective Collaboration	• Do educators, staff, students, families and community members view themselves as lifelong learners? How is this demonstrated? • Are collaborations designed to take advantage of the collective expertise of members?	• Are teams staffed with the expertise needed to support the goal of the collaboration? • Do teams have the expertise needed to collaborate effectively? How is this acquired? • How are collaborative arrangements managed and monitored? • How are participants trained or versed in the various roles, norms and expectations required for an effective collaboration?

	Culture of Expertise: Growth Mindset and Professional Learning	A System of Expertise
High-Quality Instruction and Intervention	• How are teachers supported to focus on the continuous development of expertise? • How are teachers supported in recognizing and responding effectively to a broad array of students and contexts? • How do educators use their knowledge and expertise flexibly to support powerful learning for all students? • Are standards, curriculum and materials continuously studied and applied?	• Are the most vulnerable students receiving supplemental support from the most expert teachers? • How do we support teachers and other educators in acquiring the skills and knowledge to deliver standards-based instruction aligned to curriculum?
Balanced and Comprehensive Assessment	• Do educators, staff, students, families and community members view themselve as lifelong learners? How is this demonstrated? • Are collaborations designed to take advantage of the collective expertise of members?	• Are teams staffed with the expertise needed to support the goal of the collaboration? • Do teams have the expertise needed to collaborate effectively? How is this acquired? • How are collaborative arrangements managed and monitored? • How are participants trained or versed in the various roles, norms and expectations required for an effective collaboration?
VTmtss in Action	• How is the appropriate and varied expertise accessed in decision making? • Do educators collaborate to decide the types of professional learning needed to increase expertise across the system?	• Does expertise exist in the school or district in all the components of the VTmtss framework? • During deliberations on actions, is the level of expertise required to achieve a successful outcome considered?
Overall, what are the strengths and opportunities in our system of Expertise?		

GUIDING QUESTIONS

1. Where does our expertise currently reside?
2. What resources do we need to expand our expertise to ensure that all students make progress?
3. How can we use our expertise most judiciously? Are our students getting what they need, when they need it and where they need it from the most expert professional available?
4. Are our most vulnerable learners receiving the appropriate supports from our most expert educators?
5. Do we have a variety of data, which are appropriate for the decisions we need to make?
6. How well do we know how to analyze and interpret data to support effective outcome-oriented decision-making?
7. Do collaborative arrangements include appropriate and relevant expertise to support student outcomes?

Reflection on VTmtss in Action

CONTINUOUS IMPROVEMENT EFFORTS: CREATING AN INTERCONNECTED SYSTEM

Directions: Use the chart below with the information in the VTmtss in Action section of the *VTmtss Field Guide* to think about each of the VTmtss components and use that information to examine your current commitments and activities.

- Be specific in naming the initiatives and their goals.
- Consider leadership and staff involvement, as well as time and effort required.
- Use the final column to make quick notes about any insights or observations that occur to you as you are doing this.
- Use the guiding questions below the chart to make your conversations meaningful.

Component	Initiatives, Projects, Programs	Desired Outcomes or Goals	Leader and Staff Involved	Notes, Comments, Identified Actions
Systemic and Comprehensive Approach				
Effective Collaboration				
High-Quality Instruction and Intervention				

Component	Initiatives, Projects, Programs	Desired Outcomes or Goals	Leader and Staff Involved	Notes, Comments, Identified Actions
Balanced and Comprehensive Assessment				
Expertise				
Overall, what are the strengths and opportunities for Continuous Improvement: Decision Making for Equity and Excellence				

GUIDING QUESTIONS

1. How do our existing initiatives or commitments align?
2. Which initiatives, projects or programs are focused on the same, similar or related goals and have they been explicitly linked?
3. For initiatives that rely on a particular component, have we considered the relevance of other components to its successful outcomes?
4. How do we support participants' knowledge about other initiatives and projects that are related to its goals?
5. How can we connect the work to avoid redundancy and stress and increase impact?
6. Are there some goals or outcomes that we desire that are not being addressed by any current work?
7. Overall, what are the strengths and opportunities that exist within our initiatives, projects and programs that impact continuous improvement?

Appendix A

Collaborative Arrangements for a Multi-tiered System of Supports*

ONGOING COLLABORATIVE ARRANGEMENTS

(Provide infrastructure for the multi-tiered system)

	Membership	Propose / Goals	Activities
School Leadership Teams **District Leadership Teams**	• School and /or district administrator • Additional members selected for specific knowledge and abilities	• Identify and support need for change • Strengthen understanding of VTmtss • Plan and monitor system level implementation for equity and excellence	• Create readiness for change • Support culture of collaboration • Develop school-wide schedule(s) that support collaboration • Facilitate dialogues related to curriculum, instruction, and staff need
Grade-level Teams **Content Area Teams** **Vertical Teams**	• School administrator • Classroom teachers • Relevant specialists	• Strengthen the grade level core curriculum and/or curriculum across grades • Identify students most in need of additional academic, behavioral, and emotional support • Identify expertise for timely interventions	• Use protocols to assess student performance and plan instruction • Make decisions based on classroom performance data to provide targeted interventions • Communicate with parents and other relevant teams
School Positive Behavior and Social-Emotional Support Team	• School administrator • Classroom teachers • Special educator • Behavior specialist and school psychologist • Parents • Students	• Increase academic achievement • Decrease major discipline referrals • Address the behavioral and social emotional needs of all students • Help to create a positive school climate	• Collaborate to define, teach, and support appropriate student behaviors and to create positive school environments • Incorporate social emotional learning for all students to equip them with the skills they need to succeed at school and beyond

	Membership	Propose / Goals	Activities
School Education Support Team (EST)	• School administrator • School psychologist • Classroom teacher • Parents • Students • Relevant academic and behavior specialists	• Address concerns about individual students who have complex needs beyond the scope of the grade-level team • Identify potential ways to increase the capacity of the grade level team to support all students	• Review data for how students responded to tried interventions and whose needs were not met through grade-level teams • Analyze data to determine additional support or referral to other services • Develop details of intervention plan and assure follow-up • Communicate with other departments, parents, and teachers as appropriate to the plan • Collect information for school and district continuous improvement planning to increase the capacity to support all students.
School Data Team **District Data Team**	• School and / or district administrator • Grade-level or content area teams or representatives • Specialists (i.e., school psychologist, reading specialist) • Parents and community members	• Determine what data will be collected and kept, how data will be transferred and accessed, how input will occur, etc.	• Review and analyze district or school assessment data • Determine which research-based interventions the school will access to support areas of need • Communicate with other teams (i.e.,Professional Learning) to align with data-based needs
School Professional Learning Team **Disctrict Professional Learning Team**	• School and / or district administrator • Grade-level or content-area representatives • Instructional coaches • Specialists	• Develop expertise • Determine and arrange high-quality Professional Learning that develops expertise aimed at improving student learning	• Use data to determine needs for Professional Learning that supports all components of the multi-tiered system • Learn about and access current high-quality research-based Professional Learning approaches to address needs • Provide professional learning to build expertise that best addresses identified systemic and student needs

PROBLEM-SPECIFIC COLLABORATIVE ARRANGEMENTS

(Form as needed for duration of task)

	Membership	Propose / Goals	Activities
Co-teaching	• Pairs of teachers (often general and special education) teach together in a classroom. Other common models: • Two general education teachers (often called team teaching) • Teaching assistant or para-educator with teacher	• Align expertise with student needs • Combine teachers' talents • Inclusive classroom for all learners • Increase individualized interaction between students and teachers • Learning Disabled students are active members of the general education classroom and engage fully in classroom community and curriculum, receiving specialized instruction when needed, and increased independence • All students benefit from additional supports, resources, and diversity	• Teachers and all students participate in strong, creative lessons due to teachers sharing the planning process • Teachers plan together to compliment each other's strengths and weaknesses for the benefit of improving student experiences and outcomes
Personalized Learning Support	• Students • Advisor • Core teacher(s) • Families • Community members or mentors with relevant expertise	• Monitor the overall implementation of personalized learning in the district or school	• In collaboration with teachers, parents, counselors, and others, students decide what they want to learn, how they are going to learn it, and why they need to learn it to achieve their personal goals • Students follow plan for achieving goals, communicating with their support team along the way
Coaching Arrangements Specialized Peer	• All educators	• Provide embedded and personalized professional learning to improve student learning	• Peers or specialized instructional coaches discuss and observe teaching, identify areas for improvement together, and establish ways to develop targeted expertise

Appendix B
Data Inventory

School/District _____ **Date** _____

Directions: If possible, engage a diverse group of professionals to collaborate in completing this data inventory. The goal is to get as complete a picture as possible of the tools and data that are collected in your school or district.

Note: This chart has limited number of rows and can be copied to accommodate your information.

Assessment Focus: What standard, proficiency, systemic practice, component of VTmtss, etc. is being assessed?	What **methods and tools** are used to do this?	What is the **quality** of the tool and the data it generates?	Who collects, interprets, and uses this information?

Follow up considerations:

1) What IS assessed?
2) What is NOT assessed?
3) What concerns does this inventory raise?

Digging Deeper

This section of the VTmtss Field Guide will be reviewed periodically and updated.

A SYSTEMIC AND COMPREHENSIVE APPROACH

Infrastructure, Scheduling, and Time

Further Reading

- Canady, R. L., & Rettig, M. D. (1995). The power of innovative scheduling. *Educational Leadership, 53*(3), 4-10.
- Liebtag, E., & Ryerse, M. (2017, February 24). Scheduling for learning, not convenience.

Tools

- SWIFT MTSS Starter Kit

Systemic Change

Further Reading

- Adelson, H. S., & Taylor, L., (2007). Systemic change for school improvement. *Journal of Educational and Psychological Consultation, 17*(1), 55–77.
- Schwartz, K. (2018, May 6). How to plan and implement continuous improvement in schools.
- Wagner, T. (2009). *Change leadership: A practical guide to transforming our schools*. NJ: Jossey-Bass.

Change Teams

Further Reading

- The Learner First (n.d.). *Change teams* [PDF file]. Seattle, WA: Author.

Systemic Change and Roles

Further Reading

- Costello, K., Lipson, M. Y., Marinak, B., & Zolman, M. (2010). New roles for educational leaders: Starting and sustaining a systemic approach to RTI. In M.Y. Lipson & K. K. Wixson (Eds.), *Successful approaches to RTI: Collaborative practices for improving K–12 literacy* (pp. 231-260). Newark, DE: International Reading Association.
- DuFour, R., & Mattos, M. (2013). How do principals really improve schools? *Educational Leadership, 70*(7), 34-40.

EFFECTIVE COLLABORATION

Collaboration Guideline Documents

- *A Vision for Teaching, Leading, and Learning: Core Teaching and Leadership Standards for Vermont Educators*
- *Vermont's Education Quality Standards*
- *Learning Forward: Standards for Professional Learning*
- *Vermont Guidelines for Developing Personalized Learning Plans and Flexible Pathways*
- *Comprehensive Needs Assessment Tool Kit: A Resource for Vermont Schools and School Systems Engaged in Continuous Improvement Planning*

Getting Started

Further Reading

- Knackendoffel, A., Dettmer, P., & Thurston, L. (2018). *Collaborating, consulting, and working in teams for students with special needs*. Upper Saddle River, NJ: Pearson Education, Inc.
- Sparks, D. (2013). Strong teams, strong schools. *Journal of Staff Development, 34*(2), 28-30.

Tools

- SWIFT MTSS Starter Kit

Time for Collaboration

Further Reading

- Khorsheed, K. (2007). Four places to dig deep: To find more time for teacher collaboration. *Journal of Staff Development, 28*(2), 43–45.
- Rettig, M. (2007). Designing schedules to support Professional Learning Communities. *Leadership Compass, 5*(2), 1-4.
- Stetson & Associates (2015). *Finding Time for Collaboration and Using It Well*.

Professional Learning that Supports Collaborative Team Meetings

Courses

- The Data Wise Project
- Global Learning Partners SURE-Fire Meetings

Further Reading

- Boudett, K., & City, E. (2014). Meeting wise: *Making the most of collaborative time for educators*. Cambridge, MA: Harvard Education Press.
- Boudett, K., City, E., & Murnane, R. (2013). *Data wise: A step-by-step guide to using assessment results to improve teaching and learning*. Cambridge, MA: Harvard Education Press.
- Jolly, A. (2008). *Team to teach: A facilitator's guide to professional learning team* . Oxford, OH: National Staff Development Council.

Tools

- Marzano Research reproducibles
- Solution Tree reproducibles
- State of New Jersey Department of Education (2015). *The Collaborative Teams Toolkit: Tools to support collaborative team structures and evidence-based conversations in schools*.

Websites

- School Reform Initiative

Family and Community Partnerships

Further Reading

- Colorado Department of Education (2016, July). *MTSS Family, School, and Community Partnering Implementation Guide: Supporting Every Student's Learning*.
- Colorado Department of Education (2016, August). *Colorado Practice Profile for Family School and Community Partnering*.
- Mapp, K. L., & Kuttner, P. J. (2013). *Partners in education: A dual capacity-building framework for family-school partnerships*. Austin, TX: SEDL.
- Sanders, M. (2015). *Building school-community partnerships: Collaboration for student success*. NY: Skyhorse Publishing.
- Swift (n.d.). *Guide to get you started: Trusting Family Partnerships*.
- Teaching Tolerance (2018). Family and community engagement. *Critical practices for anti-bias education*. Montgomery, AL: Author.
- Thorsen, K (2018, April 20). Creating a culture of collaborative family engagement.
- Weist, M. D., Garbacz, S. A., Lane, K. L., & Kincaid, D. (2017). *Aligning and integrating family engagement in Positive Behavioral Interventions and Supports (PBIS): Concepts and strategies for families and schools in key contexts*. Center for Positive Behavioral Interventions and Supports (funded by the Office of Special Education Programs, U.S. Department of Education). Eugene, Oregon: University of Oregon Press.

Tools

- Kansas Parent Information Resource Center. *MTSS Family, School, and Community Checklist*.
- Vermont Agency of Education. (2019). *Family Engagement Tool Kit and Self Assessment*.
- Vermont Agency of Education (n.d.). *The Vermont Early MTSS Program Inventory*.

Videos

- Habib, D. (2014). SWIFT in 60: Trusting Community Partnerships [Video file].
- Habib, D. (2014). SWIFT in 60: Trusting Family Partnerships [Video file].

Roles and Responsibilities for VTmtss

Further Reading

- American School Counselor Association (ASCA) (2008/2018). *The school counselor and multitiered system of supports.*
- North Carolina Department of Public Instruction, Exceptional Children Division (2016). *Considerations for specially designed instruction*.
- Costello, K. A., Lipson, M. Y, Marinak, B., & Zolman, M. F. (2010). New roles for educational leaders: starting and sustaining a systemic approach to RTI. In M. Y. Lipson & K. K. Wixson (Eds)., *Successful approaches to RTI: Collaborative practices for improving K–12 literacy*. Newark, DE: International Reading Association.
- Goodman-Scott, E., Betters-Bubon, J., & Donohue, P. (2019). *The school counselor's guide to multi-tiered systems of support*. New York: Routledge.
- Johnson, C. E. (2016). The role of the general educator in the inclusion classroom. In J. P. Bakkan & F. E. Obiakor (Eds.), *Advances in Special Education: Vol. 32. General and special education inclusion in an age of change: Roles of professionals involved* (pp. 21-39). Bingley, UK: Emerald Group Publishing Limited.
- Schwartz, C. (2018, December 5). What it takes to make co-teaching work. *Education Week 38*(15), 8, 10-11.
- Woods, K., Satter, A., Meisenheimer, J., & McSheehan, M. (2018). *Reframing the Role of Special Educator within an MTSS framework*. Lawrence, KS: SWIFT Education Center.

Webinars and Podcasts

- ASHA Continuing Education. (Producer). (2018). *Multi-tiered systems of support: What SLPs need to know* [Video webinar]. (Webinar available until 2021.)
- Pedagogy non-grata. Interview with Dr. Donna Scanlon: Dyslexia and Reading Difficulties.

Developing Expertise

Further Reading

- ASHA (2001). *Roles and responsibilities of speech and language pathologists* [Position statement].
- Cohen, D. K., & Ball, D. L. (1999). Instruction, capacity, and improvement. *CPRE Research Reports*.
- Immordino-Yang, M. H., Darling-Hammond, L., & Krone, C. (2018). *The brain basis for integrated social, emotional, and academic development*. Washington, DC: The Aspen Institute.

Websites

- Learning Forward
- ASCD

Coaching

Further Reading

- Aguilar, E. (2013). *The art of coaching: Effective strategies for school transformation*. San Francisco: Jossey Bass.
- Boyles, N. (2013). *Hands-on literacy coaching: Helping coaches integrate literacy content with the how-to of coaching*. Gainesville, FL: Maupin House.
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- Sweeney, D. (2011). *Student Centered Coaching: A guide for K-8 coaches and principals*. Thousand Oaks, CA: Corwin Press, (2011).
- Sweeney, D., & Mausbach, A (2018). *Leading student centered coaching: Building principal and coach partnerships*. Thousand Oaks, CA: Corwin.
- Vermont Agency of Education. *Coaching as professional learning: Guidelines for implementing effective coaching systems*.
- Walpole, S., & McKenna, M. (2012). *The literacy coach's handbook* (2nd ed.). New York: Guilford Press.

Culturally Responsive Instruction

Further Reading

- Wlodkowski, R. J., & Ginsberg, M.B. (1995). A framework for culturally responsive teaching. *Educational Leadership, 53*(1), 17-21.
- Bazron, B., Osher, D., & Fleishman, S. (2005). Research matters/Creating culturally responsive schools. *Educational Leadership, 63*(1), 83-84.
- The Education Alliance, Brown University (n.d.). Culturally responsive teaching.
- Lavorgna, J. (2016). Culturally responsive family engagement practices.

Websites

- Benjamin Banneker Association
- TODOS Math

Scheduling

Further Reading

- Flexible Scheduling
  - Canady, R. L., & Rettig, M. D. (1995). The power of innovative scheduling. *Educational Leadership, 53*(3), 4-10.
- Intentional Planning
  - Gould, E. (2015). Laying the foundation: Considerations for scheduling students with learning disabilities.
- Sample Thinking
  - Madison Metropolitan School District (2015). Scheduling Guidance. Madison, WI: Author.
- Scheduling for Co-teaching
  - Honigsfeld, A., & Dove, M. (2014). *Collaboration and co-teaching for English Language Learners: A learner's guide*. Thousand Oaks, CA: Corwin.
- Scheduling for Learning, Not Convenience
  - Liebtag, E., & Ryerse, M. (2017, February 24). Scheduling for learning, not convenience.

Interventions

Literacy

Clearinghouses and Professional Organizations

- American Speech and Hearing Association (ASHA)
- International Literacy Association
- Reading Recovery
- What Works

Mathematics

Clearinghouses and Professional Organizations

- Association of Mathematics Teacher Educators (AMTE)
- What Works
- National Council of Supervisors of Mathematics
- National Council of Teachers of Mathematics (NCTM)

Websites

- YouCubed®
    - The website started by Jo Boaler promoting success in mathematics for all students through a growth mindset approach to instruction.

Social and Emotional Learning and Behavior

Clearinghouses and Professional Organizations

- The Collaborative for Academic, Social, and Emotional Learning (CASEL)
- Edutopia

Further Reading

- National Center on Intensive Intervention (2014). *What is evidence-based behavior intervention? Choosing and implementing behavior interventions that work*. Washington, DC: American Institutes for Research.
- National Education Association Policy and Practice Department (2014). *Positive behavioral interventions and supports: A multi-tiered framework that works for every student* [Policy Brief]. Washington, DC: National Education Association.
- Northeast Foundation for Children (2009). PBIS and the Responsive Classroom® approach.

Focus on Early Education (PreK–Grade 3)

Further Reading

- CASEL (2012). *Effective social and emotional learning programs: Preschool and elementary school edition*. Chicago: Author.
- Diamond, K. E., Justice, L. M., Siegler, R. S., & Snyder, P.A. (2013). *Synthesis of IES Research on Early Intervention and Early Childhood Education*. (NCSER 2013-3001) Washington DC: National Center for Special Education Research, Institute of Education Sciences, U.S. Department of Education.

Websites

- Development and Research in Early Math Education (DREME)

Focus on K–5

Clearinghouses and Professional Organizations

- Evidence for ESSA

Further Reading

- Comprehensive Intervention Model

Focus on Middle School and High School

Clearinghouses and Professional Organizations

- Evidence for ESSA

Further Reading

- CASEL (2015). Effective social and emotional learning programs: Middle and high school edition. Chicago: Author.
- DePaoli, J. L., Atwell, M. N., Bridgeland, J. M., & Shriver, T. P. (2018). Respected: Perspectives of youth on High School & social and emotional learning. Chicago: CASEL.
- Deshler, D. D., Palincsar, A. S., Biancarosa, G., & Nair, M. (2007). *Informed choices for struggling adolescent readers: A research-based guide to instructional programs and practices*. Newark, DE: International Reading Association.
- Ehren, B. J., Deshler, D. D., & Graner, P. S. (2010). Using the Content Literacy Continuum as a framework for implementing RTI in secondary schools. *Theory into Practice, 49*(4), 315–322.

COMPREHENSIVE AND BALANCED ASSESSMENT SYSTEM

Developing a Comprehensive and Balanced Assessment System

Further Reading

- The Center on Standards and Assessment Implementation (n.d). *Measuring Social and Emotional Learning*.
- Conley, D. T., & Darling-Hammond, L. (2013). *Creating systems of assessment for deeper learning*. Stanford, CA: Stanford Center for Opportunity Policy in Education.
- Learning Point Associates (2004). *Guide to using data in school improvement efforts*. Naperville, IN: Author.
- Martin, J., & Torres, A. (2016). Data-informed decision making: A short primer (Ch. 3). In *User's guide and toolkit for the Survey of Student Engagement*. Washington, DC: NAIS.
- National Research Council (2014). Designing an assessment system. In *Developing assessments for the next generation science standards*. Washington, DC: National Academies Press.
- Ronka, D., Geier, R., & Marciniak, M. (2010). A *practical framework for building a data-driven district or school: How a focus on data quality, capacity, and culture supports data-driven action to improve student outcomes* [White paper]. Boston: Public Consulting Group.
- Sigman, D., & Mancuso, M. (2017). *Designing a comprehensive assessment system*. San Francisco: West Ed.

Systems for Recording and Managing Data

Courses

- The Data Wise Project

Tools

- Data Wise
- Illuminateed
- Infinite Campus (Student Information System)
- Powerschool Analytics
- Vermont's Comprehensive Needs Assessment Toolkit
- VCAT (Vermont Comprehensive Assessment Tool)

Intentional Use of Assessment Information

Further Reading

- Center for Collaborative Education (2012). *Quality performance assessment: A guide for schools and districts*. Boston: Author.
- National Association of Elementary School Principals (2011). *Student assessment: Using student achievement data to support instructional decision making*. Alexandria, VA: Author.
- Thomas, R. (n.d.) Why school teams don't analyze data: Eight ingredients of productive data analyses for improving student learning.

Tools

- Rhode Island Department of Education (2013). *Data Use Professional Development Series: Data Conversations*. Providence, RI.: Author.

Communicating with Family about Assessment

Tools

- Achieve
  - Achieve has developed and made available many specific tools and strategies for communicating assessment information to families.

Websites

- The National Center on Parent, Family, and Community Engagement (NCPFCE)
  - NCPFCE offers a wide array of documents and videos to support assessment topics. See, especially:
    - National Center on Parent, Family, and Community Engagement (2011). *Family engagement and ongoing child assessment*. Boston: Boston Children's Hospital and Harvard Family Research Project.
- Vermont Agency of Education Family Resources

Formative Progress Monitoring

Tools

- Archdiocese of Milwaukee (n.d.). *Formative assessment & monitoring student progress: Focused instruction, guided practice, collaborative learning, independent learning*. Milwaukee, WI: Author.

Websites

- Assessment for Learning Project

Periodic Benchmark Progress Monitoring

Further Reading

- Ardoin, S. P., & Christ, T. J., et al. (2013). A systematic review and summarization of the recommendations and research surrounding Curriculum Based Measurement of oral reading fluency (CBM-R) decision rules. *Journal of School Psychology, 51*(1), pp. 1-18.
- Foegen, A., Jiban, C., & Deno, S. (2007). Progress monitoring measures in mathematics: A review of the literature. *Journal of Special Education, 41*(2), 121-139.
- Jenkins, J. R., Graff, J. J., & Miglioretti, D. L. (2009). Estimating reading growth using intermittent CBM progress monitoring. *Exceptional Children, 75*(2), 151-163.
- Tindal, G., & Nese, J. F. T. (2013). *Oral reading fluency growth: a sample of methodology and findings* [Research brief].
- Van Noram, E. R., & Christ, T. J. (2016). Curriculum-based measurement of reading: Accuracy of recommendations form three-point decision rules. *Psychology Review, 45*(3), 296-309.

EXPERTISE

Assuring High-Quality Professional Learning

Further Reading

- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development.

Websites

- Learning Forward
  - Professional Learning Definition
  - Standards for Professional Learning
  - Standards Reference Guide
  - Standards Assessment Inventory

Professional Learning About Foundations of VTmtss

VTmtss Resources

- Vermont Agency of Education VTmtss Team
- SWIFT Resources

Hiring for Expertise

- Hall, P. (2007). Teacher selection counts: Six steps to hiring. *Education World*.
- Stronge, J. H., & Hindman, J. L. (2006). Chapter 1: Teacher quality and teacher selection. *The Teacher Quality Index*. Alexandria, VA: Association for Supervision and Curriculum Development.

Sustaining Expertise: Staff Supervision and Evaluation

Further Reading

- Darling-Hammond, L. (n.d). Criteria for an effective teacher evaluation system.

Other Resources to Deepen Understanding About Expertise and Professional Learning

Further Reading

- Darling-Hammond, L., Wei, R. Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. Dallas, TX: National Staff Development Council.

Videos

- Hattie, J. (2018, April 12). Visible Learning Mindframes: How Teachers Think Matters [Video file].

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Vermont State Board of Education (2014). *Manual of rules and practices: Series 2000 – Educational quality standards*. Barre, VT: Author. Retrieved from https://education.vermont.gov/sites/aoe/files/documents/edu-state-board-rules-series-2000.pdf

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Cowan, D., Joyner, S., & Beckwith, S. (2012b). *A teacher's guide to getting serious about the system*. Thousand Oaks, CA: Corwin.

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Newmann, F., & Wehlage, G. (1997). *Successful school restructuring: A report to the public and educators by the Center on Organization and Restructuring of Schools*. Madison, WI: Document Service, Wisconsin Center for Education Research.

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Bryk, A. S. (2010). Organizing schools for improvement. *Phi Delta Kappan, 91*(7), 23-30.

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Giangreco, M. F., Broer, S. M., & Suter, J. C. (2011). Guidelines for selecting alternatives to overreliance on paraprofessionals: Field-testing in inclusion-oriented schools. *Remedial and Special Education, 32*(1), 22–38.

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