



SPECTRUM ACADEMY **Multi-Tiered System of Supports**

Spectrum Academy Overview

Spectrum Academy opened its doors in 2006 in North Salt Lake City, Utah, with 160 students in grades K-8, with a focus on serving high functioning students with autism. We have since grown to serve over 1500 students, grades K-12, in two geographical locations in Utah.

The majority of the students served at Spectrum Academy experience special needs associated with high-functioning autism and other challenges. Autism affects an estimated 1 in 54 school-age individuals (Baio, Wiggins, & Christensen, et al, 2018). As many as 3 million Americans today are believed to have some form of autism. Data collected by the National Center for Education Statistics indicate that the number of children 6 to 21 diagnosed with autism who receive special education services has increased exponentially in the last 10 years (NCES, 2020). With this increase comes the need to design and implement programs that will help these students become successful in their educational and social environments.

Spectrum Academy provides an innovative and multidisciplinary school environment specifically designed for students who exhibit challenges with socialization, sensory integration, sensory regulation, communication, academics, executive functioning, and post-high school outcomes. Our unique framework allows our students to receive explicit, daily instruction in each of these challenge areas. Students experience small class sizes, integrated related services, and opportunities for leadership that would not be afforded them in another setting.

Mission Statement

Spectrum Academy is the premier charter school for students with autism who have mild to moderate support needs. We provide small class sizes, explicit instruction and an innovative



social skills curriculum. We help students reach their fullest potential academically, socially, and emotionally, leading to productive and successful futures.

Vision Statement

Spectrum Academy is the premier research-based model for the education of children with Autism Spectrum Disorders. We operate Pre-K through 12th grade in state-of-the-art facilities. Spectrum Academy offers quality public classes and opportunities for students in academics, technology, arts, recreation, and vocational. Thanks to generous contributions of corporate and individual sponsors, we are able to maintain small teacher-student ratios, quality related services, and a rigorous life skills program.

Educational Program: Instructional Overview

Introduction

All children have the ability to learn. In order for children with autism spectrum disorder and other unique circumstances to succeed at learning at an acceptable rate of progress, it is vital that pedagogy and instructional materials be research-based. Spectrum Academy provides an innovative and multidisciplinary school environment specifically designed for students who exhibit challenges with socialization, sensory regulation, communication, academics, executive functioning, and post-high school outcomes. Our unique framework allows our students to receive explicit, daily instruction in each of these challenge areas.

Instructional Methods

Instruction at Spectrum Academy is based on a comprehensive theory of learning and development—the Vygotskian approach. Vygotsky believed that development of a behavior



occurs on two levels, which form the boundaries of the *Zone of Proximal Development (ZPD)*. The lower level is defined by the student's *independent performance*—what the student knows and can do alone. The higher level is the maximum she can accomplish with help; this is the level of *assisted performance*. Varying degrees of partially assisted performance lie in between maximally assisted performance and independent performance.

Teachers instruct students in their ZPD through scaffolding. Scaffolding occurs in a learning environment through a gradual release of responsibility to the learner, as the learner becomes more responsible for his/her own learning and is able to demonstrate and maintain a new skill. Teachers scaffold children's learning in a variety of ways, from organizing the environment to support learning, to giving hints and prompts, to modeling what to do, to explicit instruction. Depending on what the child is learning and where the child is in the learning cycle, the teacher tailors instruction to fit these needs.

Another important component of Vygotsky's theory is the necessity for equipping students with "Tools of the Mind." Similar to the way physical tools extend humans' physical abilities by acting as extensions of the body, mental tools extend our mental abilities by acting as extensions of the mind (Vygotsky, 1978). Examples of mental tools proven to be effective for students with developmental disabilities which are incorporated into the instruction at Spectrum Academy include, but are not limited to:

- Mnemonics
- Graphic Organizers
- Visual Organizers
- Learning Styles Inventories
- Planners
- Charts/Tables/Graphs/Lists
- Organizational Software
- Music
- Assistive Technology
- Self-Regulation Strategies
- Technology

Explicit Instruction



Over the past 20 years there has been a synthesis of intervention research for students with special needs (Vaughn, Gertsen, and Chard, 2000, Mastropiere et.al., 1996, Kamil et.al., 2008, Gertsen et al., 2009, Archer and Hughes, 2011) which has shown explicit instruction to be one of the most effective methods. The sixteen elements of explicit instruction as described by educational researchers include:

1. Focus on critical content.
2. Sequence skills logically.
3. Break down complex skills and strategies into smaller instructional units.
4. Design organized and focused lessons.
5. Begin lessons with a clear statement of the lesson's goals and your expectations.
6. Review prior skills and knowledge before beginning instruction.
7. Provide step-by-step demonstrations.
8. Use clear and concise language.
9. Provide an adequate range of examples and non-examples.
10. Provide guided and supported practice (I do, we do, you do).
11. Require frequent responses.
12. Monitor student performance closely.
13. Provide immediate, affirmative, and corrective feedback.
14. Deliver the lesson at a brisk pace.
15. Help students organize knowledge.
16. Provide distributed and cumulative practice (multiple opportunities to practice a skill over time).

Spectrum Academy will utilize explicit instruction on a daily basis with students. Teachers will receive in-depth training on this method prior to the start of the school year.



Applied Behavior Analysis

Applied Behavior Analysis is the process of, “systematically applying interventions based upon the principles of learning theory to improve socially significant behaviors to a meaningful degree, *and to demonstrate that the interventions employed are responsible for the improvement in behavior*” (Baer, Wolf, & Risley, 1968). There are hundreds of research articles demonstrating the efficacy of applied behavior analysis as an intervention for individuals with autism. These studies range from group design outcome studies to single subject studies supporting the use of one specific intervention or technique.

Applied behavior analysis (ABA) comprises interventions designed to analyze and change behavior in a precisely measurable and accountable manner. It employs strategies based on scientific principles of behavior that are designed to build socially useful repertoires and reduce problematic ones. The defining assumption of ABA is that behavior is learned and controlled by contingencies within the environment.

Spectrum Academy utilizes Discrete Trial Training (DTT) primarily in classrooms where students require more support. DTT is an ABA method of teaching through simplified and structured steps. Instead of teaching an entire skill at one time, the skill is broken down and “built-up” using discrete trials that teach each of the steps, one at a time (Smith, 2001). Within DTT, each trial has a very specific set of steps that are clearly defined and scripted, and always need to be followed. Clearly defined steps allow the teachers and program supervisors to identify what specific teaching methods or “tactics” are working and which ones are not. There are six basic parts to a discrete trial:

- | | |
|---------------|--|
| 1. Antecedent | 4. Consequence for a correct response |
| 2. Prompt | 5. Consequence for an incorrect response |
| 3. Response | 6. Inter-trial interval |

Socialization



Most children learn basic social skills incidentally. For children with autism spectrum disorder the process is much more difficult and requires direct instruction in order for them to gain the necessary skills. Spectrum Academy utilizes a variety of strategies and curricula which enable teachers to give students the instruction they need for acquisition and maintenance of social skills. Students receive daily instruction in grades K-12 on a graduated continuum of skills that are necessary for post high school success. Projects and activities are carried out on a quarterly basis that allow students to utilize and generalize the skills they have learned in a community setting.

Executive Functioning



“Executive function” is a term used by researchers to describe a core set of skills needed by all individuals to be able to engage in deliberate, self-regulated behaviors. These skills include *inhibitory control*, *working memory*, and *cognitive flexibility*. Executive functions influence both cognitive processes, such as learning something new, and social emotional behaviors, such as delaying gratification and exercising self-control (Kaufman, 2010).

Spectrum Academy provides its students with daily supports to manage any executive functioning deficits through instructional methods (multimodal), strategies, and technology. Research has shown that multimodal processing reduces cognitive load because information from different modalities can be more easily chunked into short-term memory, used to build long- term representations and facilitate the acquisition of more complex procedures and task sequences.

Sensory Integration



Sensory integration is an innate neurobiological process and refers to the integration and interpretation of sensory stimulation from the environment by the brain. Sensory Integrative Dysfunction is a disorder in which sensory input is not integrated or organized appropriately in the brain and may produce varying degrees of problems in development, information processing, and behavior. Children with autism and other developmental disabilities typically have sensory systems that are either over or under reactive to stimulation in the environment. Students' inability to handle these stimuli, in many cases, leads to the stereotypical behaviors associated with autism (rocking, spinning, hand-flapping, meltdowns). Students' difficulty processing sensorimotor information can also lead to motor and coordination delays that can impact their ability to write, cut, and interact with their peers in a meaningful way.

Evaluation and treatment of sensory integrative processes is performed by occupational therapists and/or physical therapists. Spectrum Academy employs occupational therapists and occupational therapy assistants who assist our students in the following ways:

- Providing students with sensory information which helps them organize the central nervous system
- Assisting and teaching students ways to inhibit and/or modulate sensory information.
- Assisting and teaching students how to produce a more organized response to sensory stimuli
- Assisting students with the development of gross and fine motor skills
- Educating teachers on how to implement occupational therapy interventions for students throughout their school day, including how to use instructional materials such as the Zones of Regulation.
- By collecting and evaluating data on student progress in this area
- By facilitating environmental modifications to accommodate for sensory processing differences



- By educating teachers, parents, and other staff members on effective strategies for addressing and regulating sensory needs.

Communication (PD Module to be Created)

Communication delays are common in individuals with autism, and are, in fact, part of the diagnostic criteria for Autism Spectrum Disorder. Communication delays can come in the form of expressive language (including articulation errors, fluency, uneven language development, or repetitive language), receptive language, or social (pragmatic) language (including non-verbal communication, poor conversation skills, and narrow interests). Deficits in any of these areas can adversely affect educational performance by making it difficult for a student to comprehend written and verbal instructions.

Students may also have difficulty communicating their knowledge. In addition, communication delays can lead to frustration, which can result in challenging behaviors, resistance to learning, and missed instruction time. Pragmatic language delays make it difficult for individuals with autism to connect with those around them, including making and keeping friends.

Spectrum Academy employs speech/language pathologists and speech/language technicians who work to remediate communication disorders in order to facilitate educational progress. Our speech staff will:

- Evaluate students to determine service needs and degree of impairment
- Create goals and develop treatment plans to ensure student progress
- Provide direct instruction to students to remediate communication delays
- Educate teachers, parents, and other staff members on effective strategies for remediating communication delays
- Collect and maintain data on student progress



- Participate in program development, including consulting on social skills instruction, collaborating with teachers on lesson planning, and running classroom groups
- Create and implement low-tech assistive communication options
- Assist in educating staff and families to work with students using Augmentative Alternative Communication devices (AAC)

Multi-Tiered System of Supports (PD Module to be Created)

See following section.

MTSS: Multi-Tiered System of Supports

Spectrum Academy utilizes a Multi-Tiered System of Supports to implement instructional programming and evaluation of student progress in academics, social-emotional, behavioral, and related services areas. Multi-Tiered System of Supports (MTSS) is a framework for implementing systemic, evidence-based practices to maximize student achievement in academics, behavior, and social/emotional areas, in preparation for and leading to college and career readiness. Social and emotional learning is the process through which children and adults acquire and effectively apply the knowledge, attitudes and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.



This framework will serve as comprehensive guidance, policy, and procedures for Spectrum Academy administrators, faculty, and staff in order to implement research-based and institutional best practices. Student progress is measured through rigorous adherence to assessment, progress monitoring and data analysis schedules as described herein.

While a multi-tiered approach to addressing students' academic, behavioral, and social-emotional achievement could be seen as "one more initiative," we prefer to conceptualize it as a refinement of existing best-practices and aligning efforts in education into a cohesive framework. The principle of alignment emphasizes combining and/or collaborating initiatives to increase efficiency and impact. A Multi-Tiered System of Supports (MTSS) is not a program or an initiative, but rather serves as a model for increasing program alignment, creating sustainability, and making instructional decisions based on data.

MTSS Eight Critical Components (UMTSS, 2020):

(PD Module to be Created)

- a. High Quality Instruction
- b. Data-Based Decision Making
- c. Team-Based Problem Solving
- d. Equitable Education for Each Student
- e. College and Career Readiness
- f. Proactive School Climate and Structure
- g. Parent and Community Involvement
- h. Supportive Leadership

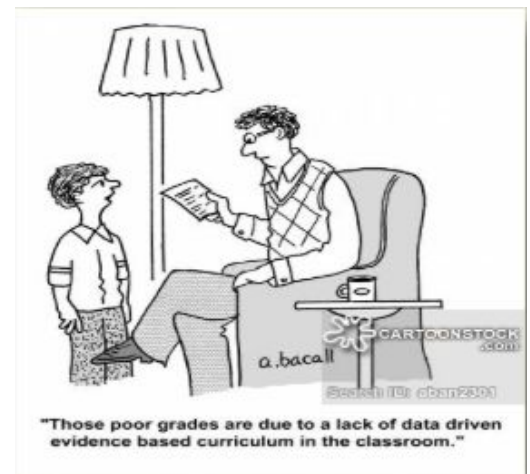


High Quality Instruction: High-quality instruction refers to the utilization of both research-validated instructional practices *and* core reading and math programs as well as high

quality instruction on behavior and social/emotional skills.. Implementing high-quality instruction allows teachers to rule out inadequate instruction as a reason for poor student performance. (IRIS module)

- a. Instructional Practices: Scientifically based instructional practices are those that instructors use to teach content and that have been demonstrated to be effective.
- b. Differentiated Instruction: Teachers should practice differentiating instruction so they can adjust instruction with automaticity, as needed, even on a minute-to-minute basis, and thereby maximize every student's potential.

Data-Based Decision Making: The *ongoing* process of collecting and analyzing different types of data, including curriculum-based assessments, computerized assessments, progress monitoring, observational and standardized assessments in order to guide decisions to improve student progress. When we do Present Levels in students' IEPs we require a "triangulation" of data. Triangulation facilitates validation of data through cross verification from more than two sources. It tests the consistency of findings obtained through different instruments and increases the chance to control, or at least assess, some of the threats or multiple causes influencing our results.



Team-Based Problem Solving: Team-Based Problem Solving is used to ensure high-quality learning is accessible and achievable for each student. Effective teams leverage the contributions of combined resources and the expertise of each team member to foster organizational success and create equitable opportunities for each student (Utah MTSS).



Equitable Education for Each Student: Involves putting systems in place to ensure that every child has an equal chance for success. That requires understanding the unique challenges and barriers faced by individual students or by populations of students and providing additional support to help them overcome those barriers. While this in itself may not ensure equal *outcomes*, we all should strive to ensure that every child has equal *opportunity* for success (<https://www.thinkingmaps.com/equity-education-matters/>)

College and Career Readiness: Preparing all students to be successful in their chosen career pathway after graduating from high school is a priority at Spectrum Academy. Beginning at age 14, students are continuously assessed using career interest inventories, employability skills assessments, self-determination rating scales and other online transition assessments. Parents and students are given Spectrum Academy's Transition Guide beginning in the 6th grade in order to better help them navigate and learn all that is involved in the transition process.

Proactive School Climate and Structure

From the beginning, it has been Spectrum Academy's philosophy to embrace every aspect of our population of students and make them feel wanted, valued and cared about. All of the things that make them unique are celebrated and developed as much as possible. Many students who have come to Spectrum Academy from traditional district schools report having no friends, being bullied horribly, never being able to participate in extracurricular activities, and not being accommodated by teachers with the very things that would have made them successful in their academics. Our school takes great pride in hiring staff who are willing to take the time to build rapport with each of their students, be interested enough to really dive deeply into what might be holding them back academically, socially, and behaviorally, and work with them in a non-judgmental way to accomplish their goals.

Staff go the extra mile to sponsor or coach after-school academic and social clubs, competitive sporting teams, dances, and proms. Students are able to campaign to be class



officers and receive other leadership opportunities that would likely not be afforded them elsewhere. They develop a sense of belonging that is so important in the adolescent years. Parents report that for the first time their children have friends!

Parent and Community Involvement

Spectrum Academy was originally formed by a group of parents who were dissatisfied with the education their students with autism were receiving in the traditional districts in which they were enrolled. Together, these parents drafted a charter that would fulfill the educational and emotional needs of their children. Parent involvement is the reason Spectrum Academy was formed and remains an integral part of our programming.

Spectrum Academy has expectations for parent and family engagement which have been drafted in line with Title I and Every Student Succeeds Act (ESSA) standards. We recognize and value the importance of working with parents and the community in a collaborative way in order to address the needs of each student.

Spectrum Academy:

- a. Involves parents, in an organized, ongoing, and timely way, in the planning, review, and improvement of programs under Title I, Part A, including the planning, review, and improvement of the school parent and family engagement policy and the joint development of the schoolwide program plan under Section 1114(b) of the ESSA.
- b. Updates the school parent and family engagement policy periodically to meet the changing needs of parents and the school, distribute it to the parents of participating children, and make the parent and family engagement policy available to the local community.
- c. Provides full opportunities, to the extent practicable, for the participation of parents with limited English proficiency, parents with disabilities, and parents of migratory



children, including providing information and school reports required under Section 1111 of the ESSA in an understandable and uniform format, including alternative formats upon request and, to the extent practicable, in a language parents understand.

- d. Abides by the following definition of parent and family engagement and carry out programs, activities, and procedures in accordance with this definition:

Parent and Family Engagement means the participation of parents in regular, two-way, and meaningful communication involving student academic learning and other school activities, including ensuring:

1. Parents play an integral role in assisting their child's learning
2. Parents are encouraged to be actively involved in their child's education at school
3. Parents are full partners in their child's education and are included, as appropriate, in decision-making and on advisory committees to assist in the education of their child
4. Other activities are carried out, such as those described in Section 1116 of the ESSA

Supportive Leadership:

Spectrum Academy's Leadership consists of a team of individuals who work in collaboration to support the implementation of the MTSS process. Our leaders:

- Encourage all educators to engage in leadership opportunities
- Improve existing teacher and administrator preparation and training through implementation of high quality professional development
- Encourage school leaders to engage with staff in Collaborative Teacher Teams (CTTs) in order to improve teaching practices and use data to improve student outcomes
- Promote career pathways that incentivize effective teachers to engage in alternative teacher leadership roles while they remain active in the classroom



Through this support, teachers are mentored and retained, and leaders and teachers advocate for the learners, the school, the community, and the profession (Utah MTSS, ND).

MTSS

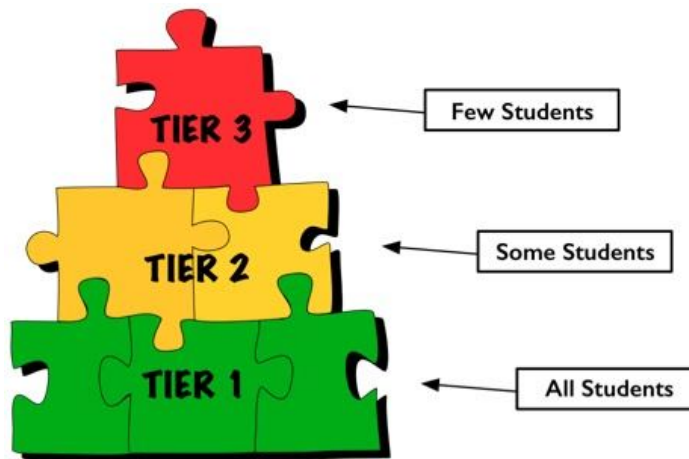
MTSS is a framework for integrating assessment and intervention and systemic, evidence-based practices in order to maximize student achievement in academics, behavior, and social-emotional areas in preparation for and leading to college and career readiness (National Center on Response to Intervention, 2014). The combination of systematic implementation of increasingly intensive intervention, herein referred to as tiers, and carefully monitoring students' progress distinguishes MTSS from typical prevention measures.

In an MTSS framework, emphasis is placed on ensuring that interventions are implemented effectively. This is often referred to as implementation integrity or fidelity (Batsche et al., 2006). Response to Intervention (RTI) is an approach to academic intervention used to provide early, systematic, and appropriately intensive assistance to students who are at risk for or already underperforming as compared to appropriate grade- or age-level peers. It has been thought of as a system that is used to identify students in need of special education services.

RTI is part of a MTSS framework, but the inverse is not true. MTSS provides a more complete solution. It not only implements an intervention process (RTI), but addresses behavioral and social-emotional issues, provides support for educators, and recognizes the need to incorporate outside influences. Spectrum Academy's MTSS layered continuum of supports includes Universal (Tier 1), Targeted (Tier 2), and Intensive (Tier 3) levels, which are defined for several identified critical components, such as academics, behavior, social-emotional learning, and educational equity.

- **Universal (Tier 1)**: represents those supports provided to all students. Tier 1 practices should be implemented with fidelity prior to addressing practices for Tier 2 or 3.

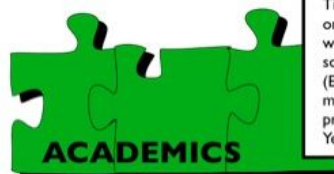
- **Targeted (Tier 2):** represents additional supports provided to remediate or accelerate student success.
- **Intensive (Tier 3):** represents individually-responsive supports intended to further remediate or accelerate student success and do not necessarily equate to special education services. Individually-responsive supports are developed based on individual need but may be provided in a small group or individual format. Tier 2 and 3 supports are provided in addition to, not in place of, Tier 1 instruction (PBIS.org).



Spectrum Academy Tiered Supports For All Academic Areas

Tier I

- Research based curriculum
- Implementation of research based instructional strategies
- Implementation of high leverage practices in special education



Tier I Academics is considered effective if, with only access to core instruction, 80% of students who are continuously enrolled throughout the school year score above or well above End of Year (EOY) benchmark in reading, math, and science, as measured by progress monitoring tools that predict student growth based upon Beginning of Year (BOY) scores.



Tier I Social is considered effective if, with only access to Tier I instruction, 75% of continuously enrolled students show annual, individual improvement in social-emotional skills as measured by beginning, middle and end of year assessments.

- Teacher training
- Paraprofessional training
- Universal assessments with administration schedule
- Instructional coaches with coaching schedule
- Fidelity to teaching block time
- Progress monitoring monthly
- Collaborative Teacher Team (CTT) meetings for data analysis
- Anti-Bullying Lessons using Virtues Curriculum and Tough Kid Bully Blockers.

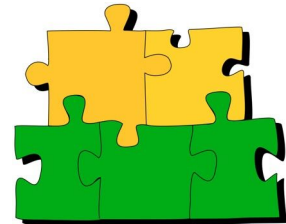


Tier I Sensory is considered effective if, with only access to Tier I instruction, 75% of continually enrolled students show annual, individual improvement in sensory regulation abilities as measured by beginning, middle and end of year assessments.

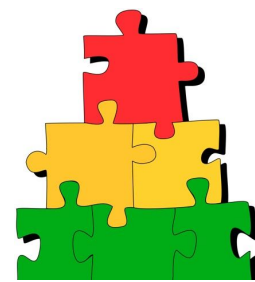
Tier II

All Tier I supports and in addition:

- Small group instruction
- Additional instruction time in areas lacking student progress
- Additional visual supports
- Additional sensory supports
- Communication supports
- Possible change in instructional materials
- Instructional coaches meet with teachers weekly
- Progress monitoring bi-weekly
- Mental Health Push In classrooms using various therapeutic modalities including CBT and DBT



Tier III



All Tier I and II supports and in addition:

- Small group or 1:1 instruction
- Assistive technology evaluation
- Change in instructional materials
- Instructional coaches meet with teachers twice weekly
- Progress monitoring weekly
- Assistive technology
- Individual and small group counseling

MTSS Fidelity (PD Module to be Created)

Through adherence to important elements of fidelity, we are able to ensure that:

- Research-based materials and instruction have been implemented as intended
- Student outcomes are linked to instruction
- Effectiveness and instructional decision-making are determined appropriately

Factors Influencing Fidelity:

- a. Teacher Characteristics: Self-confidence and enthusiasm lead to increased fidelity
- b. Program [Curriculum] Properties: Complexity of the program
- c. Teacher Training: Detailed and clear instructions during training, followed by observations
- d. Institutional Features: Openness of an organization to problem-solve
- e. School culture and staff morale

The following Five Elements of Fidelity, endorsed by the American Institutes for Research, are incorporated into teacher training at Spectrum

Academy:

1. Exposure/duration to instruction and interventions

Five Elements of Fidelity

Student Engagement:
How engaged and involved are the students in this intervention or activity?

Program specificity:
How well is the intervention defined and different from other interventions?



Adherence: How well do we stick to the plan, curriculum, or assessment?

Exposure/Duration:
How often does a student receive an intervention? How long does an intervention last?

Quality of Delivery: How well is the intervention, assessment, or instruction delivered? Do you use good teaching practices?



2. Quality of the delivery of instruction
3. Programs are defined and targeted
4. Strategies for student engagement
5. Adherence to the plan

In implementing our instructional framework and Multi-Tiered System of Supports, Spectrum Academy utilizes high leverage practices and high impact instructional strategies in a cross-curricular, interdisciplinary manner. Therefore, the following practices are naturally included in the MTSS procedures for all subject areas and will not be repeated in each section.

High Leverage Practices In Special Education (PD Module to be Created)

The Council for Exceptional Children (CEC), and the Collaboration for Effective Educator, Development, Accountability and Reform (CEEDAR), after extensive research, released the following High Leverage Practices in Special Education (McLeskey, et.al, 2017). These practices are endorsed by the Office of Special Education Programs (OSEP). Spectrum Academy also endorses and implements these practices as part of its MTSS program.

HLP1 Collaborate with professionals to increase student success. Collaboration with general education teachers, paraprofessionals, and support staff is necessary to support students' learning toward measurable outcomes and to facilitate students' social and emotional well-being across all school environments and instructional settings (e.g., co-teaching). Collaboration with individuals or teams require the use of effective collaboration behaviors (e.g., sharing ideas, active listening, questioning, planning, data inquiry cycles, problem solving, negotiating) to develop and adjust instructional or behavioral plans based on student data, and the coordination of expectations, responsibilities, and resources to maximize student learning.

HLP2 Organize and facilitate effective meetings with professionals and families. Teachers lead and participate in a range of meetings (e.g., meetings with families, individualized education program [IEP] teams, instructional planning) with the purpose of identifying clear, measurable student outcomes and developing instructional and behavioral plans that support these outcomes. They develop a meeting agenda, allocate time to meet the goals of the agenda,



and lead in ways that encourage consensus building through positive verbal and nonverbal communication, encouraging the sharing of multiple perspectives, demonstrating active listening, and soliciting feedback.

HLP3 Collaborate with families to support student learning and secure needed services. Teachers and related service providers collaborate with families about individual children's needs, goals, programs, and progress over time and ensure families are informed about their rights as well as about special education processes (e.g., IEPs). Teachers should respectfully and effectively communicate considering the background, socioeconomic status, language, culture, and priorities of the family. Teachers advocate for resources to help students meet instructional, behavioral, social, and transition goals. In building positive relationships with students, teachers encourage students to self-advocate, with the goal of fostering self-determination over time. Teachers also work with families to self-advocate and support their children's learning.

HLP4 Use multiple sources of information to develop a comprehensive understanding of a student's strengths and needs. To develop a deep understanding of a student's learning needs, special educators compile a comprehensive learner profile through the use of a variety of assessment measures and other sources (e.g., information from parents, general educators, other stakeholders) that are sensitive to language and culture, to (a) analyze and describe students' strengths and needs and (b) analyze the school-based learning environments to determine potential supports and barriers to students' academic progress. Teachers should collect, aggregate, and interpret data from multiple sources (e.g., informal and formal observations, work samples, curriculum-based measures, functional behavior assessment [FBA], school files, analysis of curriculum, information from families, other data sources). This information is used to create an individualized profile of the student's strengths and needs.

HLP5 Interpret and communicate assessment information with stakeholders to collaboratively design and implement educational programs. Teachers interpret assessment information for stakeholders (i.e., other professionals, families, students) and involve them in the



assessment, goal development, and goal implementation process. Special educators must understand each assessment's purpose, help key stakeholders understand how culture and language influence interpretation of data generated, and use data to collaboratively develop and implement individualized education and transition plans that include: goals that are standards-based, appropriate accommodations and modifications, and fair grading practices, and transition goals that are aligned with student needs.

HLP6 Use student assessment data, analyze instructional practices, and make necessary adjustments that improve student outcomes. After special and regular education teachers develop instructional goals, they evaluate and make ongoing adjustments to students' instructional programs. Once instruction and other supports are designed and implemented, teachers have the skills to manage and engage in ongoing data collection using curriculum-based measures, informal classroom assessments, observations of student academic performance and behavior, self-assessment of classroom instruction, and discussions with key stakeholders (i.e., students, families, other professionals). Teachers study their practice to improve student learning, validate reasoned hypotheses about salient instructional features, and enhance instructional decision making. Effective teachers retain, reuse, and extend practices that improve student learning and adjust or discard those that do not.

HLP7 Establish a consistent, organized, and respectful learning environment. To build and foster positive relationships, teachers should establish age-appropriate and culturally responsive expectations, routines, and procedures within their classrooms that are positively stated and explicitly taught and practiced across the school year. When students demonstrate mastery and follow established rules and routines, teachers should provide age-appropriate, specific performance feedback in meaningful and caring ways. By establishing, following, and reinforcing expectations of all students within the classroom, teachers will reduce the potential for challenging behavior and increase student engagement. When establishing learning environments, teachers should build mutually respectful relationships with students and engage them in setting the classroom climate (e.g., rules and routines); be respectful; and value ethnic,



cultural, contextual, and linguistic diversity to foster student engagement across learning environments.

HLP8 Provide positive and constructive feedback to guide students' learning and behavior. The purpose of feedback is to guide student learning and behavior and increase student motivation, engagement, and independence, leading to improved student learning and behavior. Effective feedback must be strategically delivered and goal directed; feedback is most effective when the learner has a goal and the feedback informs the learner regarding areas needing improvement and ways to improve performance. Feedback may be verbal, nonverbal, or written, and should be timely, contingent, genuine, meaningful, age appropriate, and at rates commensurate with task and phase of learning (i.e., acquisition, fluency, maintenance). Teachers should provide ongoing feedback until learners reach their established learning goals.

HLP9 Teach social behaviors. Teachers should explicitly teach appropriate interpersonal skills, including communication, and self-management, aligning lessons with classroom and schoolwide expectations for student behavior. Prior to teaching, teachers should determine the nature of the social skill challenge. If students do not know how to perform a targeted social skill, direct social skill instruction should be provided until mastery is achieved. If students display performance problems, the appropriate social skill should initially be taught, then emphasis should shift to prompting the student to use the skill and ensuring the “appropriate” behavior accesses the same or a similar outcome (i.e., is reinforcing to the student) as the problem behavior.

HLP10 Conduct functional behavioral assessments to develop individual student behavior support plans. Creating individual behavior plans is a central role of all special educators. Key to successful plans is to conduct a functional behavioral assessment (FBA) any time behavior is chronic, intense, or impedes learning. A comprehensive FBA results in a hypothesis about the function of the student's problem behavior. Once the function is determined, a behavior intervention plan is developed that (a) teaches the student a pro-social replacement behavior that will serve the same or similar function, (b) alters the environment to



make the replacement behavior more efficient and effective than the problem behavior, (c) alters the environment to no longer allow the problem behavior to access the previous outcome, and (d) includes ongoing data collection to monitor progress.

HLP11 Identify and prioritize long- and short-term learning goals. Teachers prioritize what is most important for students to learn by providing meaningful access to and success in the general education and other contextually relevant curricula. Teachers use grade-level standards, assessment data and learning progressions, students’ prior knowledge, and IEP goals and benchmarks to make decisions about what is most crucial to emphasize, and develop long- and short-term goals accordingly. They understand essential curriculum components, identify essential prerequisites and foundations, and assess student performance in relation to these components.

HLP12 Systematically design instruction toward a specific learning goal. Teachers help students to develop important concepts and skills that provide the foundation for more complex learning. Teachers sequence lessons that build on each other and make connections explicit, in both planning and delivery. They activate students’ prior knowledge and show how each lesson “fits” with previous ones. Planning involves careful consideration of learning goals, what is involved in reaching the goals, and allocating time accordingly. Ongoing changes (e.g., pacing, examples) occur throughout the sequence based on student performance.

HLP13 Adapt curriculum tasks and materials for specific learning goals. Teachers assess individual student needs and adapt curriculum materials and tasks so that students can meet instructional goals. Teachers select materials and tasks based on student needs; use relevant technology; and make modifications by highlighting relevant information, changing task directions, and decreasing amounts of material. Teachers make strategic decisions on content coverage (i.e., essential curriculum elements), meaningfulness of tasks to meet stated goals, and criteria for student success.

HLP14 Teach cognitive and metacognitive strategies to support learning and independence. Teachers explicitly teach cognitive and metacognitive processing strategies to



support memory, attention, and self-regulation of learning. Learning involves not only understanding content but also using cognitive processes to solve problems, regulate attention, organize thoughts and materials, and monitor one's own thinking. Self-regulation and metacognitive strategy instruction is integrated into lessons on academic content through modeling and explicit instruction. Students learn to monitor and evaluate their performance in relation to explicit goals and make necessary adjustments to improve learning.

HLP15 Provide scaffolded supports. Scaffolded supports provide temporary assistance to students so they can successfully complete tasks that they cannot yet do independently and with a high rate of success. Teachers select powerful visual, verbal, and written supports; carefully calibrate them to students' performance and understanding in relation to learning tasks; use them flexibly; evaluate their effectiveness; and gradually remove them once they are no longer needed. Some supports are planned prior to lessons and some are provided responsively during instruction.

HLP16 Use explicit instruction. Teachers make content, skills, and concepts explicit by showing and telling students what to do or think while solving problems, enacting strategies, completing tasks, and classifying concepts. Teachers use explicit instruction when students are learning new material and complex concepts and skills. They strategically choose examples and non-examples and language to facilitate student understanding, anticipate common misconceptions, highlight essential content, and remove distracting information. They model and scaffold steps or processes needed to understand content and concepts, apply skills, and complete tasks successfully and independently.

HLP17 Use flexible grouping. Teachers assign students to homogeneous and heterogeneous groups based on explicit learning goals, monitor peer interactions, and provide positive and corrective feedback to support productive learning. Teachers use small learning groups to accommodate learning differences, promote in-depth academic related interactions, and teach students to work collaboratively. They choose tasks that require collaboration, issue directives that promote productive and autonomous group interactions, and embed strategies that



maximize learning opportunities and equalize participation. Teachers promote simultaneous interactions, use procedures to hold students accountable for collective and individual learning, and monitor and sustain group performance through proximity and positive feedback.

HLP18 Use strategies to promote active student engagement. Teachers use a variety of instructional strategies that result in active student responding. Active student engagement is critical to academic success. Teachers must initially build positive student–teacher relationships to foster engagement and motivate reluctant learners. They promote engagement by connecting learning to students’ lives (e. g., knowing students’ academic and cultural backgrounds) and using a variety of teacher-led (e.g., choral responding and response cards), peer-assisted (e. g., cooperative learning and peer tutoring), student-regulated (e.g., self-management), and technology supported strategies shown empirically to increase student engagement. They monitor student engagement and provide positive and constructive feedback to sustain performance.

HLP19 Use assistive and instructional technologies. Teachers select and implement assistive and instructional technologies to support the needs of students with disabilities. They select and use augmentative and alternative communication devices and assistive and instructional technology products to promote student learning and independence. They evaluate new technology options given student needs; make informed instructional decisions grounded in evidence, professional wisdom, and students’ IEP goals; and advocate for administrative support in technology implementation. Teachers use the universal design for learning (UDL) framework to select, design, implement, and evaluate important student outcomes.

HLP20 Provide intensive instruction. Teachers match the intensity of instruction to the intensity of the student’s learning and behavioral challenges. Intensive instruction involves working with students with similar needs on a small number of high priority, clearly defined skills or concepts critical to academic success. Teachers group students based on common learning needs; clearly define learning goals; and use systematic, explicit, and well-paced instruction. They frequently monitor students’ progress and adjust their instruction accordingly.



Within intensive instruction, students have many opportunities to respond and receive immediate, corrective feedback with teachers and peers to practice what they are learning.

HLP21 Teach students to maintain and generalize new learning across time and settings. Effective teachers use specific techniques to teach students to generalize and maintain newly acquired knowledge and skills. Using numerous examples in designing and delivering instruction requires students to apply what they have learned in other settings. Educators promote maintenance by systematically using schedules of reinforcement, providing frequent material reviews, and teaching skills that are reinforced by the natural environment beyond the classroom. Students learn to use new knowledge and skills in places and situations other than the original learning environment and maintain their use in the absence of ongoing instruction.

HLP22 Provide positive and constructive feedback to guide students' learning and behavior.

The purpose of feedback is to guide student learning and behavior and increase student motivation, engagement, and independence, leading to improved student learning and behavior. Effective feedback must be strategically delivered and goal directed; feedback is most effective when the learner has a goal and the feedback informs the learner regarding areas needing improvement and ways to improve performance. Feedback may be verbal, nonverbal, or written, and should be timely, contingent, genuine, meaningful, age appropriate, and at rates commensurate with task and phase of learning (i.e., acquisition, fluency, maintenance). Teachers should provide ongoing feedback until learners reach their established learning goals.

High Impact Instructional Strategies (PD Module to be Created)

The research of John Hattie and Robert Marzano supports the findings of the CEC and CEEDAR, by emphasizing high impact strategies aimed to increase opportunities for teacher success and to cultivate student growth and achievement. Hattie has conducted 15 years of research on the achievement of 300 million school-aged students. He has combined the data from 1,500 meta-analyses to determine which strategies have a high impact on student learning.



Hattie's book *Visible Learning* describes strategies with a .40 effect size or higher as being within the Zone of Desired Effect, which is equal to 1+ year of student growth.

Marzano (2009) has also conducted research on instructional strategies that maximize teachers' ability to enhance student achievement. He has identified three areas central to school improvement: (1) sustaining effective instructional strategies system-wide, (2) using classroom and grading practices to provide effective feedback to students, and (3) building strong student academic vocabulary.

High Impact Instructional Strategies (adapted from Granite School District)

Strategy	Description	Examples
<u>Scaffolding</u> .82 effect size	Scaffolded instruction is used to move students toward stronger understanding and independence in the learning process. A teacher provides temporary levels of <u>support</u> that are incrementally removed when they are no longer needed, gradually shifting the responsibility of learning to the student.	<ul style="list-style-type: none"> • Graphic organizers • Reading guides • Concept mapping • Cornell Notes • Strategies (mnemonics, etc.)
<u>Teacher Clarity</u> .75 effect size	Teacher clarity demonstrates clear and shared purposes and goals for learning in planning and student interaction. The teacher provides daily objectives, rubrics, models, and identifies which students need further support. High expectations are maintained for ALL students. <u>Explicit Instruction</u> provides clear directions with an explanation, demonstration, and modeling. Skills are taught in manageable steps and students are given the opportunity to practice skills with a small group and independently. (.57 effect size)	<ul style="list-style-type: none"> • Rubrics • Student self tracking • Explicit instruction: I do, We do, You do • SACS Lesson Design Template • Learning objectives with purpose

<p><u>Feedback</u></p> <p>.75 effect size</p>	<p>Feedback can close the gap between the present and desired performance. The aim of effective feedback is timely, specific, understandable, and actionable. quality feedback improves performance and gives students the opportunity to continue in the learning process.</p>	<ul style="list-style-type: none"> • Asking frequent higher order questions • Corrective Feedback Cycle • 5:1 positive to corrective feedback
<p><u>Effective Vocabulary Instruction and Discussions</u></p> <p>.67 effect size</p>	<p>Effective vocabulary instruction builds knowledge of the meaning and correct usage of a word, as well as understanding through multiple exposures, examples, non-examples, and discussions. A consistent vocabulary protocol increases understanding and enables efficient vocabulary acquisition. (.67 effect size, Hattie 2012)</p> <p><u>Classroom Discussions</u> Opportunities should be provided to practice academic language through speaking, writing, and discussions. (.82 effect size)</p>	<ul style="list-style-type: none"> • Marzano's 6 step protocol • Structured discussion frames • Fishbowl • Inside/Outside Circles
<p><u>Active Student Engagement</u></p> <p>.60 effect size</p>	<p>Active engagement is the process of involving ALL students in opportunities that encourage them to develop understanding of content by working with and reflecting upon the material being presented.</p> <p><u>Structured Grouping</u> uses targeted instruction and accountable responses in pairs or small groups to allow for greater engagement and learning. This will increase individual responsibility for learning and enhance social skills.</p>	<ul style="list-style-type: none"> • Opportunities to Respond • Choral response • Small groups • Precision Partnering • Jigsaw Method • Reciprocal Teaching

The goal for emphasizing high impact and high leverage strategies is to increase opportunities for teacher success and to cultivate student growth and achievement within Spectrum Academy. Spectrum Academy encourages administrators, coaches, and teachers to support the Spectrum model by implementing high impact instructional strategies that increase student proficiency and foster positive change in our schools.



MTSS Leadership Team

Spectrum Academy's MTSS Leadership Team (Team) is comprised of K-12 district directors, building administrators, program administrators, and coaches. The Team is responsible for:

1. Implementing evidence-based tools for measuring fidelity of MTSS implementation at the school level
2. Consistently measuring fidelity of implementation of universal (Tier 1) practices in academics, behavior, and social-emotional using a validated fidelity measure
3. Consistently measuring fidelity of implementation of targeted (Tier 2) and intensive (Tier 3) interventions at least 3 times yearly
4. Ensuring evidence-based data collection tools are used to measure student outcomes for academics, social-emotional, and behavior
5. Reviewing quarterly student outcome data as an indicator of instruction and interventions in academics, social-emotional, and behavior at all tiers, and reporting results to the Executive Director of Academic

MTSS Responsibilities

Directors, Administration, and Coaches:

- Be thoroughly familiar with all aspects of this MTSS manual and be able to train and provide support to all administrators, educators and staff on all of its contents through the use of research-based training methods
- Complete training and demonstrate MTSS Trainer competencies prior to training any staff (see table below)
- Monitor the fidelity of implementation by administrators, educators, and staff, through observation and thoughtful feedback on performance
- Hold all administrators, educators, and staff accountable for implementation as



described herein

Educators:

- Be thoroughly familiar with and be able to implement all aspects of this MTSS manual after receiving training
- Participate in a professional manner during all trainings
 - Give complete attention to the instructor (electronics, including cell phones, put away, listening bodies, etc.)
 - Actively participate through reflective listening, questioning, thoughtful input, note-taking
 - Ask coaches and achievement specialists for additional training if uncertain how to implement something
 - Participate with a positive attitude
- Complete training and demonstrate knowledge of all applicable items on the Competency Checklists

COMPETENCY CHECKLIST					
Pedagogy	Curriculum	Assessments	Sensory	Behavior	SpEd
Explicit Instruction	Read Well K-3	Acadience Reading (K-8)	Zones of Regulation	Social Scene Investigation (SSI)	Writing IEPs
High Impact Instructional Strategies	StudySync 6-12	IXL Reading & Math 7-12	AT Equipment use	Level system	Triangulation of Data
Executive Functioning	enVision Math K-12	iReady Reading & Math K-8	Basic Sensory Strategies	ABC Chain & Reinforcement	Data Collection
Instructing learners	Number Worlds K-8	Overall Testing Fidelity			Transition



w/autism					
Technology in the Classroom	Orton-Gillingham Methods	State Assessments			Classroom Visuals
	Step-up-Writing K-8	Data Collection			
	Reading Street 4-6				

PROGRAM OF INSTRUCTION AND MTSS: READING

Reading is an essential skill for success in both school and life. For that reason, learning to read is a primary goal for every student as they enter Spectrum Academy. Students with autism (as well as other disabilities) often face great difficulty on the path to becoming successful readers. Their struggle can lead to poor self-esteem and frustration. Students can have difficulty learning to read for many reasons. Reading disabilities, learning English as a second language, and lack of early exposure to alphabetic principles can all impact reading outcomes. Evidence-based interventions which are necessary for students with specific reading disabilities also improve reading outcomes for *all* struggling readers (The IRIS Center, 2006).

Definition of Literacy

Literacy is the ability to read, write, speak and listen, and use numeracy and technology, at a level that enables people to express and understand ideas and opinions, to make decisions and solve problems, to achieve their goals and to participate fully in their community and in wider society. Achieving literacy is a lifelong learning process (USBE, 2019). Over 30 years of research exists indicating how children learn to read and write, why some children struggle to do so, and what components and instructional practices are essential to provide effective instruction in literacy.



Much has been learned from research about what it takes to help all children to be successful readers and writers. Overwhelmingly, research has substantially supported the use of evidence-based literacy practices using systematic, explicit, cumulative instruction when teaching the seven essential components of literacy: oral language, phonological awareness, phonics, fluency, vocabulary, comprehension, and writing.

Essential Components of Literacy (PD Module to be Created)

For most children learning to read is not effortless. Typically, students who struggle with reading in the early grades will struggle in all academic areas. This is so because the curriculum in the upper grades relies more and more on independent reading skills. Because of this, it is important to assess and remediate reading skills when students are young (The IRIS Center, 2006).

Spectrum Academy implements the use of evidence-based literacy practices using systematic, explicit, cumulative instruction when teaching the seven essential components of literacy below (The IRIS Center, 2006):

- | | |
|-----------------------|------------------|
| 1. Phonemic Awareness | 5. Comprehension |
| 2. Phonics | 6. Oral Language |
| 3. Fluency | 7. Writing |
| 4. Vocabulary | |

Phonemic Awareness (PA): A broad skill that includes identifying and manipulating units of oral language - parts such as words, syllables, onsets, and rimes (National Reading Panel, 2000).

1. PA is taught in kindergarten and first grade, however, it should be taught to any struggling reader to fill in their gaps of knowledge.
2. PA consists of purely auditory skills

3. PA refers to the ability to hear, identify, and manipulate phonemes (smallest units of sounds that are blended together to create words)

*Example: the three phonemes in the word “cap” are /c/ /a/ /p/.

4. Students who demonstrate proficiency with PA skills in the early grades generally:
 - a. Have an easier time learning to read
 - b. Acquire better reading comprehension
 - c. Learn to spell more accurately
 - d. Learn how to decode words



Research (Pressley, 2006) shows that, “Students with poor phonemic awareness skills in first grade are more likely to have reading difficulties in fourth grade.” Phonemic awareness is a better predictor of early reading acquisition than IQ, vocabulary, and listening comprehension (National Reading Panel, 2000).

Phonics: Refers to teaching students about the relationship between sounds and written letters (alphabetic principle). Students are then taught to decode and read words (decoding is the ability to identify basic sounds - and sound blends - that make up a word and then use this knowledge to read the word).

1. Phonics is taught no later than kindergarten and continues through third grade and beyond, depending on student need.
2. Students need to acquire strong phonics (and word study) skills, to be able to translate written text into spoken words with automaticity (recognizing words quickly and accurately without having to think about it). By demonstrating



phonics automaticity, students are able to focus more on the meaning of the text (comprehension).

3. When phonics instruction is delivered systematically and explicitly, students' decoding skills are improved (National Reading Panel, 2000).

Fluency: Refers to reading text with accuracy, speed and with expression.

1. Fluency is taught during the second half of first grade and continues through the third grade and beyond, depending on student need.
2. It takes time and a lot of practice to become a fluent reader. Fluency and reading comprehension skills go hand-in-hand. Readers who struggle with fluency tend to work so hard at decoding individual words in sentences that they end up not understanding what they have read.
3. Fluency develops when students practice reading and rereading words, passages, or other texts with a high degree of success. Therefore, students should practice reading fluency to increase their decoding and word-recognition skills. Students who have developed automaticity can quickly process high-frequency words and can decode new words rapidly (Chard, Vaughn, & Tyler, 2002).

Vocabulary: Vocabulary refers to a knowledge of words and what they mean. There are two types of vocabulary:

- Oral vocabulary refers to the recognition of words that we hear and speak.
 - Reading vocabulary refers to the recognition of words that we read and write
1. Vocabulary instruction should occur in all grades because it benefits all students regardless of the students' reading levels.



2. Though students can learn the basics of phonemic awareness and phonics without having a large vocabulary, beginning readers with a relatively extensive vocabulary will have an easier time recognizing printed words. Conversely, students who begin school with poor vocabularies are at a big disadvantage. These students tend to have a difficult time with fluency and comprehension, potentially leading to a dislike of reading. Subsequently, this dislike triggers an avoidance of reading, preventing students from learning new vocabulary and, thus, creates a negative cycle that results in poor academic achievement. In addition to affecting academic skills, a poor vocabulary impacts students in social situations.

Research Shows that students' reading comprehension and overall success relates strongly to the extent of their vocabulary knowledge (Lehr et al., 2006). The relationship of vocabulary to reading comprehension gets stronger as reading material becomes more complex and the vocabulary becomes more extensive (Verhoeven and Snow, 2002).

Comprehension: Reading comprehension is the ability to understand written text, and it ultimately occurs when students translate written text into spoken text. This is a process that, combined with prior knowledge, allows them to:

- Identify simple facts presented in written text (literal comprehension)
 - Make judgments regarding the written text's content (evaluative comprehension)
 - Connect the text being read to other written passages and situations (inferential comprehension)
1. Reading comprehension instruction begins in kindergarten and continues through third grade and beyond. It is necessary to achieve academic success and to continue a lifetime of learning.
 2. Students have a significantly greater chance of understanding what they have read when they employ a variety of reading-comprehension strategies. Although



asking students questions about what they read is important, doing so *is not the same* as teaching them reading-comprehension strategies. This skill must be taught to students of all grade levels.

Oral Language: is the system through which we use spoken words to express ourselves (expressive language— speaking) and understand others (receptive language—listening). Oral language is the foundation of written language (Dyslexia Handbook, 2018).

Writing: the ability to communicate knowledge, ideas, and feelings in written form.

1. Written Composition, Writing Mechanics, and Writing Fluency: Broadly defined, written expression includes a complex set of abilities (e.g., idea generation; organization of ideas; ability to generate topic sentences, supporting sentences, and concluding sentences, and editing and revision; mechanics—capitalization, punctuation, handwriting and keyboarding). Additional factors to assess include vocabulary, spelling, grammar, and syntax (e.g., sentence structure).
2. Writing fluency is the ability to smoothly and effortlessly compose written texts.

Reading Disabilities (PD Module to be Created)

Spectrum Academy considers any struggling reader to be included in the following definition. Difficulty with learning to read fluently and with accurate comprehension despite a normal or above-average intelligence. Dyslexia is the most common learning difficulty, [and] one out of every five people struggle with dyslexia in its various forms” (Dyslexia Handbook, 2018, p.4).

Samuel Orton, a physician and neuropathologist, “recognized that dyslexia was neurologically based but that its treatment must be educational” (Berninger & Wolf, 2015, p. 5).



The science of reading instruction is clear and supports the need for explicit, direct, systematic, cumulative approaches. It is essential to understand and recognize the characteristics of dyslexia so that a student showing signs of reading difficulty can obtain the appropriate high quality instruction and the accommodations needed to succeed in school (IDEA, 2014). Spectrum Academy uses materials that are empirically validated and Orton-Gillingham based for instruction of students with reading difficulties.

Spectrum Academy utilizes **five key elements** to support literacy outcomes (USBE, 2019):
(PD Module to be Created)

Element 1 - Instructional Leadership:

- Organizing resources around a shared, evidence informed vision of student literacy, engaging in collaborative goal setting, and implementing and monitoring strategies that meet local literacy demands that result in student and teacher growth.

Element 2- Instruction and Intervention:

- Strong standards-based instruction embedded in content areas
- Data-informed planning
- Differentiation and individualization
- Evidence-based pedagogical approaches
- Effective classroom management

Element 3 - Assessment and Feedback:

- Examine individual student and class data
- Involve students in their data
- Use the data to guide, inform, adjust instruction, and address identified needs

Element 4 - Professional Learning:

- Coaching
- Mentoring

- Observation (including peer observations)
- Leveraging the effectiveness of high-performing teachers, coaches, and leaders by using them as models and peer coaches

Element 5 - Supportive Culture:

- Meet the needs of each student
- Create a literacy rich learning environment for student learning where staff are confident in their roles and relationships
- Promote a community culture that values trust, respect, and high expectations.



Tier I (Core Instruction) Grades K-8:

Spectrum Academy teachers adhere to the following schedule for Tier I reading instruction:

Core Literacy Areas	Frequency	Grades	Evidence-based Curriculum/Strategies
Phonological Awareness, Phonics, Fluency, Vocabulary, Comprehension, Oral Language	60 minutes/day 5x/week	K-8	Read Well / StudySync & Independent Online Evidenced-Based Program
Phonological Awareness, Phonics, Fluency, Vocabulary, Comprehension, Oral Language	30 minutes/day 5x/week	K-6	Sonday Essentials
Writing	30 minutes/day 5x/week	K-6	Read Well Composition Step Up To Writing
	Included in English classes	7-8	Step Up To Writing
**Literacy components as needed	30 minutes/day 5x/week	K-3	Response to Intervention (Actually Tier II, but put into all schedules K-3)



Flexible Grouping Practices (Included in Tiers PD)

Flexible grouping helps engage students and facilitates the acquisition of literacy skills. In addition to whole-group instruction, teachers will be trained to use a combination of:

- Small groups (both of same ability and of mixed ability)
- Paired instruction
- Independent work
- One-on-one instruction (if needed and possible)

Spectrum Academy uses the following model for K-8 instructional Grouping:

First 30 Minute Rotation M-W-F			
<u>Instructions for Para</u> Group A: Explicit Instruction w/curriculum Group C: Monitor students at independent station	Para Group A	Teacher Group B	<u>Instructions for Teacher</u> Group B: Explicit Instruction w/curriculum Group D: Monitor students at independent station
	Independent On-line Program Group C	Independent On-line Program Group D	
2-3 Minute Sensory Break			
<u>Instructions for Para</u> Group B: Explicit Instruction w/curriculum Group D: Monitor	Para Group B	Teacher Group A	<u>Instructions for Teacher</u> Group A: Explicit Instruction w/curriculum Group C: Monitor



students at independent station	Independent On-line Program Group D	Independent On-line Program Group C	students at independent station
Second 30 Minute Rotation M-W-F			

First 30 Minute Rotation T-TH			
<u>Instructions for Teacher</u> Group A: Explicit Instruction w/curriculum Group C: Monitor students at independent station	Teacher Group A	Para Group B	<u>Instructions for Para</u> Group B: Explicit Instruction w/curriculum Group D: Monitor students at independent station
	Independent On-line Program Group C	Independent On-line Program Group D	
2-3 Minute Sensory Break			
<u>Instructions for Teacher</u> Group B: Explicit Instruction w/curriculum Group D: Monitor students at independent station	Teacher Group B	Para Group A	<u>Instructions for Para</u> Group A: Explicit Instruction w/curriculum Group C: Monitor students at independent station
	Independent On-line Program Group D	Independent On-line Program Group C	
Second 30 Minute Rotation T-TH			



Tier II and III Intervention Procedures- Reading (Included in Tiers PD)

Entry Criteria: Student scoring below or well-below benchmark 6 weeks from BOY benchmark assessment. At Spectrum Academy, reading classes are set up using Tier I and II components.



Organizational Factors	Tier 2	Tier 3
Extra time allotted for instruction	30 minutes, 4 days a week	60 minutes, 4 days per week
Instructional grouping	4-5 students	1-3 students
Duration of intervention	Until student scores at or above benchmark for three consistent progress monitoring probes.	Until student scores at or above benchmark for three consistent progress monitoring probes.
Interventionist facilitating group	General education teacher, intervention specialist	Intervention specialist, content specialist, special education teacher
Assessment Factors	Tier 2	Tier 3
Level of diagnostic assessment	Group diagnostic assessment	Individual diagnostic assessment
Intensity of progress monitoring	Biweekly	Weekly
Assessment /data framework For CST and CTT	Group-level RIOT/ICEL Description of RIOT/ICEL	RIOT/ICEL Description of RIOT/ICEL
Instructional Factors	Tier 2	Tier 3
Opportunities to Respond (or other high-Impact strategy)	Ensure at least 6-8 OTRs/minute	Ensure at least 8-12 OTRs/minute
Ongoing Instructional Coaching	Coaches meet with teachers weekly	Coaches meet with teachers twice weekly
Instructional Focus	Use of core and supplemental programs with support of reteaching and Review Group-level needs	More strategically structured, remediation intervention programs Individual-level needs
Behavioral expectations	Provide more structured systems to reinforce and correct challenging behavior	Use functional behavioral assessment to plan an individualized intervention
Amount of review and repetitions	Review and practice of core concepts taught in Tier 1	More intensive practice of core and remediation content More time spent reviewing and practicing
Error Correction	Prompt students to correct errors	Provide direct error correction procedures
Scaffolding	Utilize "I do, We do, You do together" framework	Provide more intensive guided practice during "we do"



Curriculum & Materials

Spectrum Academy uses the Common Core State Standards (CCSS) in all subject areas for its core curriculum. Instructional materials have been selected very carefully based on research and past success with student growth. The following table outlines the Tier I core instructional materials that will be used at each grade level with details following.

READING CURRICULUM OVERVIEW:

Grade	Reading Tier 1 Small Group	Reading Tier 1 Phonics	Reading Tier 2 Small Group	Reading Tier 3 1:1 / Small Gr.	Writing
K-3	Read Well	Sonday Essentials	Read Well RTI 30 min	Sonday System 1	Read Well K-1 Step up to Writing
4-5	Reading Street	Sonday Essentials (K-5)	Reading Street RTI 30 min	Sonday System 2 Third Quest (6th)	Step up to Writing
6-8	StudySync	Sonday System 2	StudySync RTI 30 min	Sonday System 2 Third Quest	Step up to Writing Utah Compose
9-12	Study Sync		StudySync RTI 30 min	Third Quest	Step up to Writing Utah Compose

Tier I Reading Program Descriptions

Read Well® (PD Module to be Created)

(All information written about Read Well® is used with express permission from its author, M. Sprick, via email correspondence, February 23, 2020).

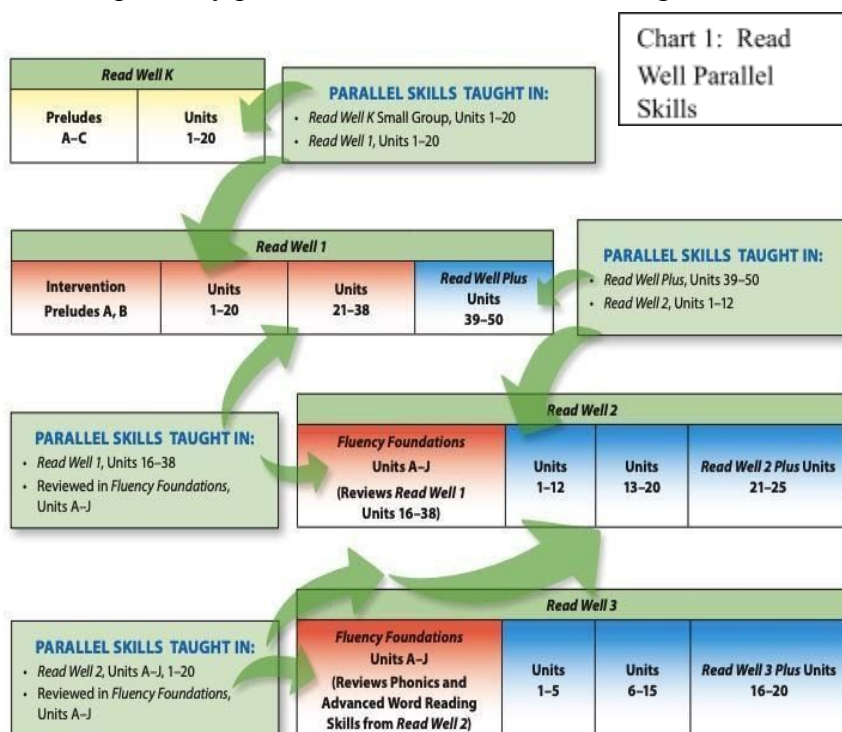
Spectrum Academy began its use of the *Read Well* Language Arts program in 2007. Research (Frasco, 2008) indicates its effectiveness with struggling readers, as the program is

based on the tenets of scaffolded instruction, where teachers begin by presenting models, and gradually decrease their support by providing guided practice, before students are asked to complete the skill or strategy independently. For example, the student and teacher read new text aloud, with the teacher reading the difficult or irregular words. As student skills (and motivation) increase, the amount of teacher-read text decreases, and the student is given greater independence. The program combines daily whole class activities with small group lessons.

Read Well is systematic and explicit in its instructional framework for teaching the “Big 5” literacy components. It facilitates multiple entry points into the materials, allowing for flexible grouping and pacing.

The ability to provide small group instruction is vital to the success of students at Spectrum Academy and students are assessed at the end of every unit in order to identify needs for further differentiation and/or remediation. Skills are taught in a “spiraled” fashion, meaning they are not just taught once and then never

revisited. Skills are taught, and then revisited throughout the year, and in subsequent grades, as outlined in the chart above (Voyager Sopris Learning). *Read Well* is aligned to the Utah Common Core, Orton-Gillingham methodologies, and Marzano’s 9 Effective Teaching Strategies (Voyager Sopris Learning).





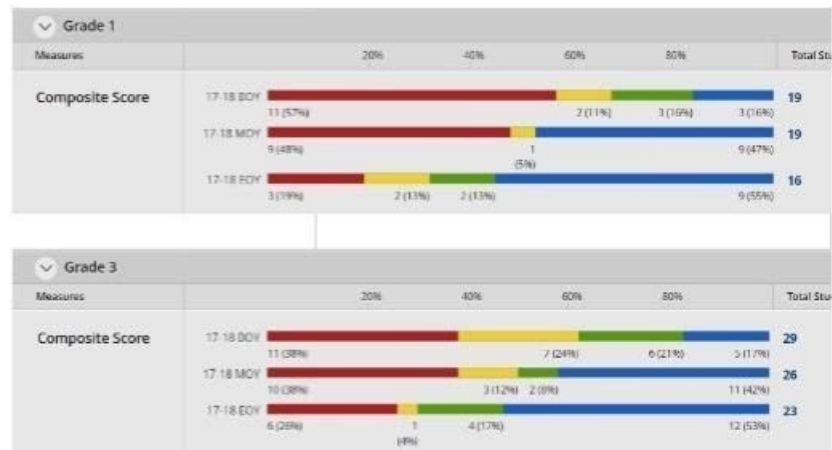
Data collected from Acadience Reading over the past three years indicate a continued upward trend of student progress using Read Well, other Tier II and III interventions, and providing an instructional coach. (PD Module to be Created for Acadience Reading)

Grade 1:

Teaching with fidelity running four 30-minute groups using "assess, teach, reassess, reteach" philosophy.

Grade 3:

Change of instruction starting January. Used Read Well 2 & 3 instead of RS. Created small groups.



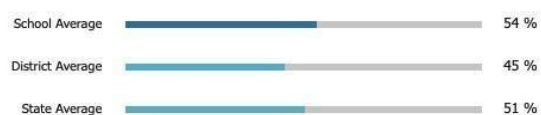
January, 2017 - 43% of 3rd grade students were making typical to well-above progress. By changing grade 3 curriculum to *Read Well* Spectrum Academy was able to fill the gap in student's reading deficiencies - increasing the possibility of obtaining grade level benchmark proficiency within .5 - 3 years. Within three months of instruction, students went from 43% adequate yearly progress (AYP) to 72% in June, 2017.

By June of 2018, 96% of 3rd grade students made typical, above or well-above progress that was expected for 3rd graders in the state of Utah. By June 2019, after an expansion which doubled the size of the student population, 80% of K-3 students were above or well-above benchmark (addition of 350 new students in grades K-8).

The following is a snapshot from Spectrum Academy's School Report Card for the 2018/2019 school year, which is located on the State of Utah's Data Gateway under Early Literacy.

HOW DID THE SCHOOL PERFORM COMPARED TO DISTRICT AND STATE?

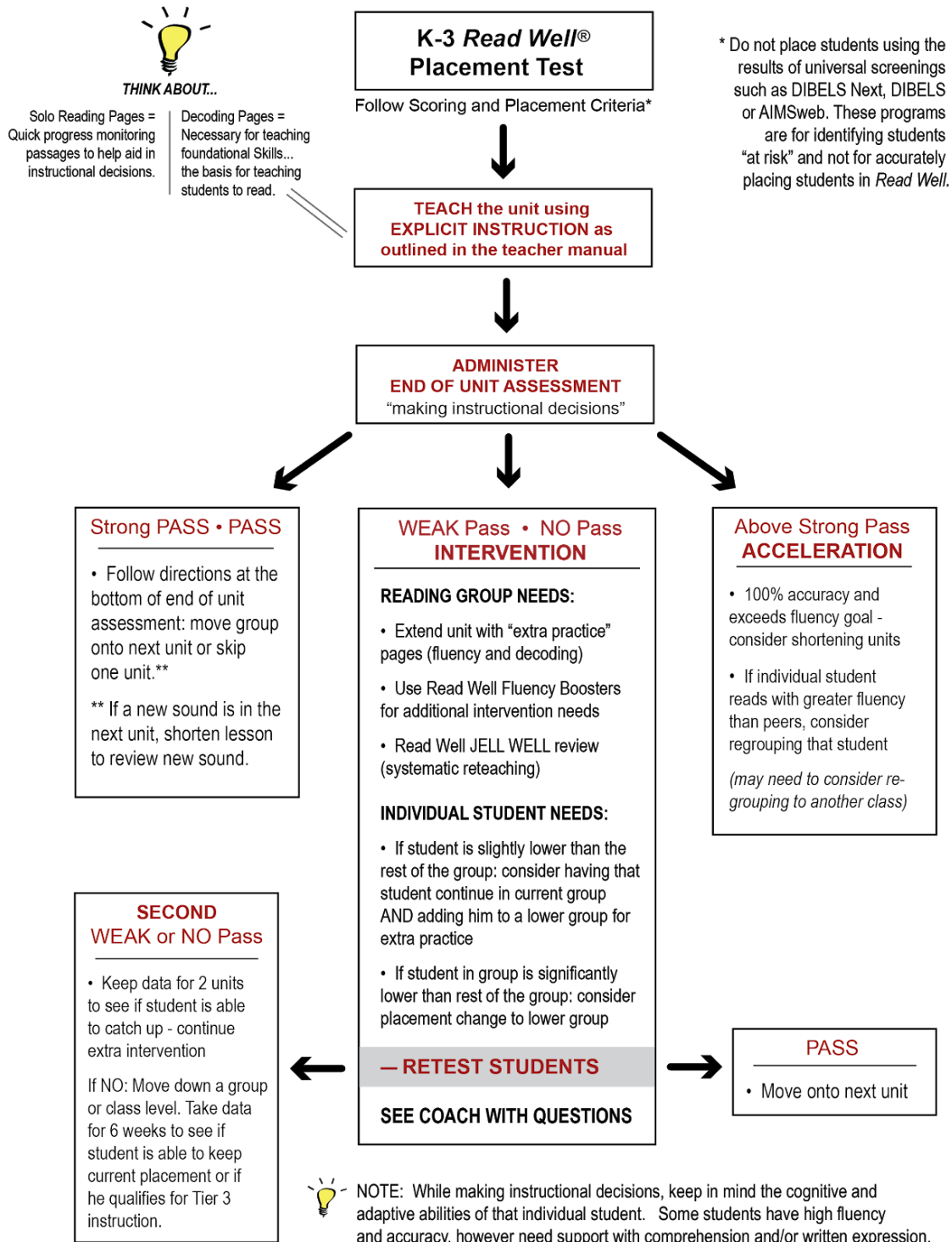
READING ON GRADE LEVEL



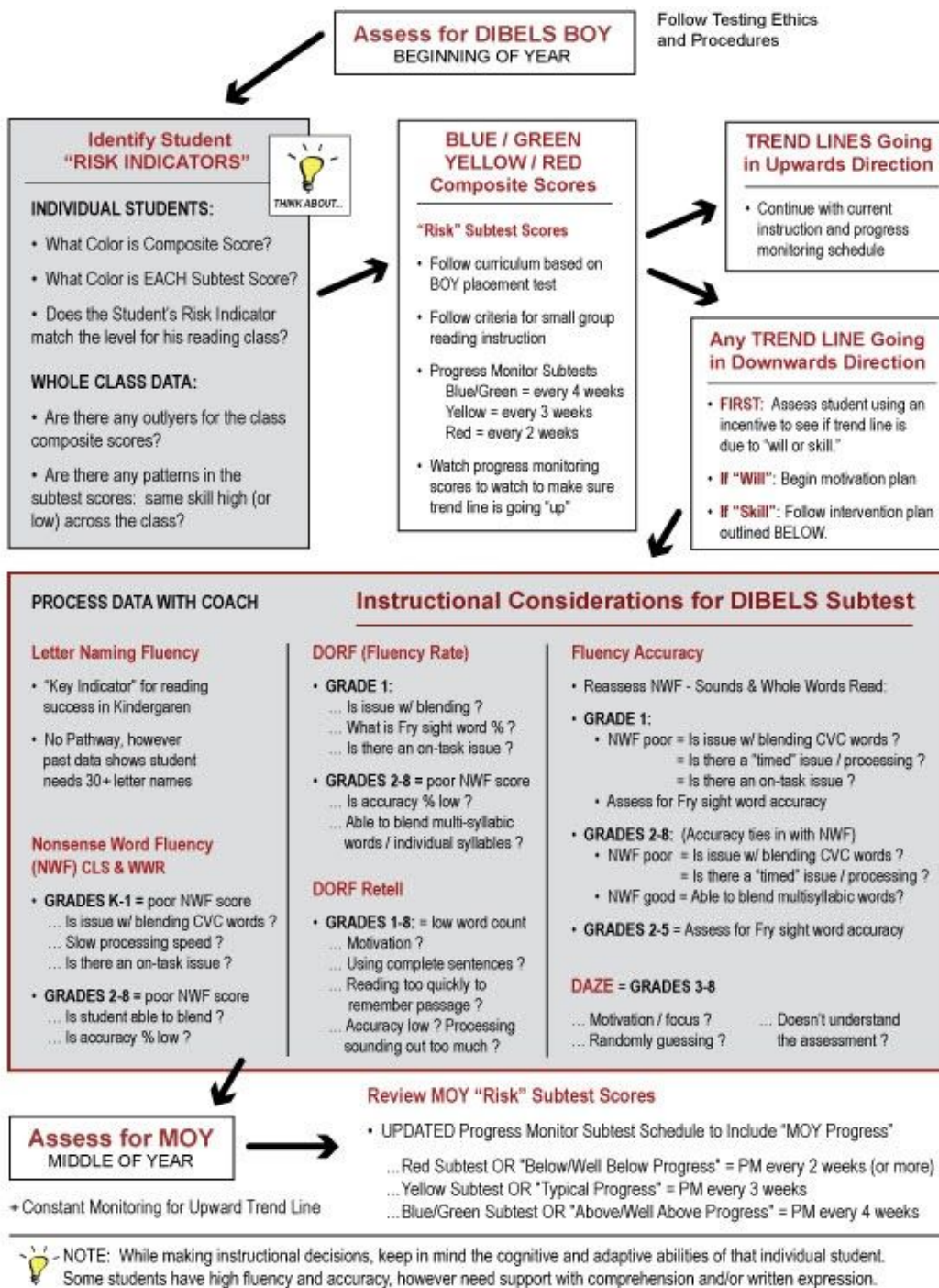
MAKING TYPICAL OR BETTER PROGRESS



Read Well Decision-Making Chart



Acadience Reading Decision-Making Chart





Spectrum Academy will adopt Wonders Reading ©2020 instructional materials for grades 4-6. We chose Wonders due to its scaffolded support, focus on foundational skills with integrated spelling and grammar, and its four levels of embedded, daily small group instruction and practice. Additionally, it has Tier 2 instruction and suggestions for gifted and talented learners. Differentiated instruction is built into the resources and lessons, which not only helps students with the scaffolding or extensions they need to be an active part of the lessons, but assists teachers in decreasing planning time.

Researchers (Dorsey & Windy 2015) have revealed a statistically significant increase of Acadience Reading scores for students using Wonders from the beginning of the year to the end of the school year. The effectiveness of this curriculum will be continuously monitored through our student assessment program. Wonders is aligned with the Common Core State Standards and will be aligned with the CAS prior to the start of the 2021/2022 school year (McGraw-Hill).

Study Sync - (PD Module to be Created)

StudySync® is an integrated print and digital ELA program for grades 7–12 that is used in multiple implementation models both online and off. In Grades 7–8, instruction is focused on strong skills- and standards-based instruction that will provide the foundation for success in high school and beyond (McGraw-Hill).

StudySync:

- Includes six units per grade for 180 days of integrated reading, writing, listening, and speaking instruction
- Has continuously growing library of over 2000 classic and contemporary texts
- Supports interchangeable print and digital use
- Enhances instruction with multimedia and digital tools
- Automatically embeds scaffolds so all students reach their potential (McGraw-Hill)

Student Reading and Writing Companion



The print Student Edition allows students to transition to offline work. It includes every text from the Thematic units, as well as all accompanying Think Questions, Skills Focus, and Writing Prompts.

Assessments

Assessment guides instruction in StudySync. Ongoing benchmark, formative, and summative assessments provide teachers with the information they need to help every student progress toward standards mastery. Progress monitoring and reporting tools allow our teachers to easily track student gains and revise instruction according to remediation needs. One of the most important reasons for our choice of StudySync is that it embeds scaffolded instruction and provides extra lessons so teachers have resources at the ready to meet the needs of every learner in their classrooms. When students log in, they see assignments that have yet to be completed. When students choose an assignment, they have automatic access to any scaffolds or graphic organizers associated with that lesson.

Data tracking and presentation tools help teachers use the results of assessments to identify which standards and skills present particular challenges for students, as well as where students are excelling and are ready for enrichment. Tracking tools for assessments will provide teachers with a raw score as well as a breakdown of students' performance against standards and performance against skills. In addition, color-coded reporting will allow teachers to quickly and easily monitor students' performance and needs.


Sonday System Essentials (PD Module to be Created)

(K-5 Tier 1 Phonics Program)

Sonday System Essentials is a systematic, direct, and explicit way to teach phonics and other essential reading skills to the whole class, or small group using multisensory, Orton Gillingham methods. It is designed to supplement Tier 1 core curriculum by filling the gaps of foundational skills that can be missed by the typical core curricula.

This is a scripted program which allows teachers to focus more on teaching and spend less time on preparation. Through weekly mastery checks, teachers are able to quickly identify students who need more intensive Orton-Gillingham intervention.

Tier II and III Reading Programs and Descriptions



Grade	Tier II	Tier III
K-3	Read Well	Sonday 1
4-12	Language! (Wonders Tier II for 4-8)	Language! Sonday 1 & 2
5-12	Third Quest	Sonday 1 & 2

Sonday System 1 & 2 (PD Module to be Created)

All Sonday System curricula are multisensory Orton-Gillingham reading programs. Sonday System 1 and 2 are Tier III explicit instruction programs for small group reading intervention time.

The program is systematic and cumulative: its organization of material follows the logical order of language. Skills are introduced from simple to complex and each lesson builds on previous learning. The most common sounds are introduced first. Concepts spiral throughout subsequent lessons and are reviewed throughout to strengthen mastery.

Each lesson contains the following essential elements:

1. A review of what has been previously taught
2. The introduction of new material
3. Practice with connected text

Due to lessons being scripted, teaching assistants are also able to deliver instruction. The lessons guide the teacher to directly teach a sound or concept and reinforce it with tracing.



Students then practice reading and spelling words using the sound or concept. Lesson design allows the teacher to focus more on students and immediate identification and correction of errors, leading to better instructional decisions. There are frequent mastery checks for reading and spelling and plans can be prescribed based on these data results.

Reading Research studies conducted over the past 70 years have included the Orton-Gillingham method. Studies cited were in 1940, 1956, 1969, 1979 and 1984. NRP identified Orton-Gillingham as one of the effective methodologies that address the needs of struggling students (National Reading Panel, 2000). Careful analysis shows that the Sonday System® follows the teaching methodology of Orton-Gillingham closely. The Author of the Sonday System®, Arlene Sonday is a Founding Fellow and first president of the Academy of Orton-Gillingham Practitioners and Educators, the only Orton-Gillingham credentialing organization (Windsor Learning).

Third Quest® (PD Module to be Created)

(All information written about the Third Quest® is used with express permission from its author, M. Sprick, via email correspondence, March 10, 2020).

The nature of reading difficulties becomes more complex as students grow older. Students who struggle as adolescent readers may have a single targeted need, or they may be weak in many aspects of reading. The Third Quest is a comprehensive reading intervention that can be implemented whole class or in small groups. It is hard to keep struggling students engaged when they are in upper grades and still trying to learn how to read. Our students have found the historical “quests” really engaging so they are motivated to keep going.

Research-based lessons include bell-to-bell instruction in vocabulary, word study (building automaticity with foundational reading skills), comprehension, fluency, and study skills. The program also provides work with employability skills related to perseverance, teamwork, professionalism and integrity (Ancora Publishing).



Benchmark Assessments / Progress Monitoring

Criteria for entry into the program is the ability to read 60 to 130 wcpm on a sixth-grade passage (approximately a 3rd to 5th grade reading level.) External oral reading fluency (ORF) measures, such as Acadience Reading, is used to:

- Gather pretest data (BOY) for end of year (EOY) growth comparisons.
- Establish a baseline
- Identify ambitious ORF goals for each student

Internal ORF assessments are used to monitor progress at the end of Levels 1-7. These assessments allow teachers to see whether or not students are making adequate progress on important skills being taught.

Research Results

Field tested students gained as much 68 words correct per minute in fluency. (The average gain in fluency was 35 words correct per minute across 90 days of instruction.) Students also gained as much as 4.1 grade equivalent units in comprehension and vocabulary across 90 days of instruction. (The average gain was 1.4 grade equivalents, roughly 3 times the expected gain).

Language!® (PD Module to be Created)

Language!® Fourth Edition is an intensive, comprehensive literacy curriculum for students in grades 4–12 who are substantially below grade-level expectations. This intervention was chosen due to its explicit, systematic approach that is proven to accelerate the growth of struggling readers and nonreaders, Language! integrates instruction in foundational skills, writing, vocabulary, fluency, grammar, comprehension, and spoken English. Language!:

- Rapidly advances struggling readers to grade-level literacy
- Fills gaps in literacy learning and ensures strong foundational skills



- Builds student experience with literary and informational text
- Prepares students for literacy in the content areas
- Provides comprehensive results documentation—proven to accelerate growth
- Meets specific student needs with multiple entry and exit points and ongoing differentiation
- Integrates powerful technology to empower teachers to deliver instruction digitally
- Incorporates Six Traits of Writing to help students build sophisticated writing skills

Language! is designated as a “strong” intervention as defined by ESSA, based on strong evidence from at least one well-designed and well-implemented experimental study. This study showed Language! demonstrated a strong and measured impact on improving student outcomes or other relevant outcomes (Voyager Sopris Learning).

Ongoing Curriculum Development

Content Review Committee

There is a Content Review Committee that will be identified by the executive director of academics and regional director. Committee membership shall include the following persons:

- Teachers and/or instructional coaches with strong content knowledge and instructional practice in the pilot resource
- One community member (can be an appointee from a Board member)
- One facilitator who may or may not be from the above groups (executive director of academics, academic achievement specialist or designee)
- Students nominated by their principal who have either taken the class or are currently in the class (if deemed age appropriate).

Roles and Responsibilities



Utilizing a rubric approved by the executive director of academics, academic achievement specialist or designee, the Content Review Committee ensures suitability of resources. The committee follows the REDSAAM® criteria for determining the appropriateness of the resource:



- Research based
- Explicit
- Differentiated
- Spiraled
- Assessment driven
- Aligned to state standards
- Multi-sensory

The Content Review Committee will produce a report with final recommendations.

Plan For Evaluating Pupil Performance

During the summer prior to the start of school, all enrolled students will be invited to come to the school to participate in curriculum placement assessments for reading and math. This will allow our staff to appropriately level students for the first day and avoid having to shuffle students around after school starts. Spectrum Academy will administer assessments according to the following draft calendar: (PD and/or Module to be Created)

Dates	Assessment	Content Areas and Grades Assessed				
		Reading/ELA	Math	Science	School Specific	Other
BOY/EOY	KEEP	K	K			
BOY/MOY /EOY	Acadience Reading Benchmark	K-8				



BOY/MOY /EOY	i-Ready Reading & Math	K-8	K-8			
BOY/MOY /EOY	IXL Reading & Math	7-12	7-12			
BOY/MOY /EOY	Social Skills and SPQ				K-12	
MOY	WIDA ACCESS for ELLs					K-12
EOY	RISE	3-8	3-8	4-8		
EOY	Utah Aspire Plus	9-10	9-10	9-10		
EOY	ACT	11	11	11		
EOY	DLM	3-11	3-11	4-11		
EOY	Keyboarding					5
EOY	Civics					10-12
MOY/EOY	CTE					9-12
MOY/EOY	Financial Literacy					10-12

Spectrum Academy will monitor student achievement of all goals listed in our charter and those mandated by the USBE, with the following process and schedule.

Data gathered through these assessments will be utilized for early identification of and subsequent instructional decision making for struggling students, gifted students, teachers who may need additional coaching, and whole school improvement planning. Spectrum Academy values and strives to protect as much instructional time as possible while ensuring accurate and complete information in order to inform instruction for student attainment of Adequate Yearly Progress (AYP.)

Gr. K-3	Type of Assessment	Assessment	Instructional Decisions
READING	Standardized Curriculum-based Standards Based Assessments Computer / Independent	Acadience Reading Read Well CCSS iReady	<ol style="list-style-type: none"> Beginning 6-weeks <u>after BOY Acadience Reading</u> benchmark assessments, Spectrum Academy uses current Acadience Reading Pathway subtests data to monitor progress: <ol style="list-style-type: none"> Red benchmark = Progress monitor every 2 weeks Yellow benchmark = Progress monitor every 3 weeks Blue/Green benchmark = Progress monitor every 4 weeks. If progress monitoring data shows upward trend = continue current Tier I instruction
Gr. 4-6	Type of Assessment	Assessment	
READING	Standardized Curriculum-based Standards Based Assessments Computer / Independent	Acadience Reading MAP Gr.3-8 Reading Street CCSS iReady	<ol style="list-style-type: none"> If 3 data probes show flat or decreasing trend = introduce Tier 2 curriculum with Additional RTI Time (<i>Continue Tier I instruction</i>) <ul style="list-style-type: none"> If after 4-6 weeks the student's data shows progress then continue instruction. If after 4-6 weeks the student's data is still not showing progress, meet with CTT and coach to consider Tier 3 curriculum (<i>Continue Tier I instruction</i>). If triangulation of data does not match, look for reasons: <ol style="list-style-type: none"> Timed vs. Untimed Monitored vs. Independent Processing Speed Anxiety Additional Reasons?
Gr. 7-8	Type of Assessment	Assessment	
READING	Standardized Curriculum-based Standards Based Assessments Computer / Independent	Acadience Reading StudySync CCSS iReady	<ol style="list-style-type: none"> <u>After MOY Acadience Reading</u> benchmark assessments, Spectrum Academy uses current Acadience Pathway subtests data to determine if change of instruction is needed: <ol style="list-style-type: none"> Red benchmark <u>OR</u> "below/well-below pathways progress" = Progress monitor every 2 weeks Yellow benchmark <u>OR</u> "typical pathways progress" = Progress monitor every 3 weeks Blue/Green benchmark <u>OR</u> "above/well-above pathways progress" = Progress monitor every 4 weeks.
Gr. 9-12	Type of Assessment	Assessment	
READING	Standardized Curriculum-based	Acadience Reading StudySync	



	Standards Based Assessments Computer / Independent	CCSS	
--	---	------	--

Spectrum Academy meets weekly during CTT meetings as well as through team / individual teacher coaching sessions to triangulate data from the sources listed above. Teachers receive on-going professional development on how to use this data to enhance core instruction as well as to make change of instruction decisions for students as needed.

All faculty and staff will meet at the end of the school year in a spring data reflection to review results from RISE, ACT, and benchmark assessments (Acadience Reading, iReady, IXL) to disaggregate data and determine lowest performance areas. With this information, we formulate a plan for the following school year.

Communication to Parents and Community

Student progress on assessments is communicated on a regular basis through the following avenues:

1. BOY, MOY, EOY benchmark HomeConnect Acadience Reading Reading Parent Report
2. BOY, MOY, EOY math benchmark and growth assessment data
3. IEP Meetings Annually:
 - a. On-line computer program report for growth and grade level
 - b. IEP academic data graphs from past year (academic and social / behavior goals)
4. IEP Progress Reports 4x/year
5. Class Subject Report Cards 4x/year
6. Each parent-teacher conference access to student binder with assessments, writing samples (can request it at any time). EOY send the entire binder home.
7. Whole School Report Card posted on the school website



PROGRAM OF INSTRUCTION AND MTSS: MATHEMATICS

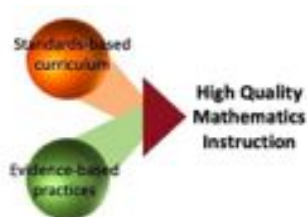
Introduction

Spectrum Academy believes educators must address the strengths and needs of each student. Embracing this approach includes an understanding that personal or social circumstances such as gender, disability, ethnic origin, race, immigration status, native language, or family background, are not obstacles to achieving educational potential (Asia Society, 2018). Coordinated efforts are required to support each student in mastering focused grade-level standards and developing a deep understanding of mathematical concepts and techniques. Spectrum Academy students are best taught in a supportive climate characterized by high expectations.

Mathematics is key to many of our most common daily activities and routines. With technology playing an increasingly important role in society, more jobs require some level of proficiency in mathematics and science. Students who lack sufficient mathematical knowledge and skills are more likely to experience negative outcomes as adults, including fewer opportunities for meaningful employment and a reduced likelihood of economic independence (The IRIS Center, 2017).

High Quality Mathematics Instruction

To improve student mathematics performance, Spectrum Academy implements high-quality mathematics instruction. This instruction involves the implementation of both:



- **A standards-based curriculum** – The concepts and skills believed to be important for students to learn
- **Evidence-based practices (EBP)** – Strategies or practices proven through research to be effective for teaching mathematical concepts and procedures



High quality mathematics instruction is woven into our tiered system of supports.

Tier I Math Instruction

Wherever Spectrum Academy operates, state core standards and curriculum are strictly followed.

Evidence Based Practices (EBP)

Most of us have a strong tendency to make choices or take actions based on familiarity. As educators, this carries over into our classrooms through delivering instruction around practices and methods to which we have grown accustomed. These might be commonly used practices or ones that we have noticed our colleagues use in their own classrooms. They might even be practices or strategies that we learned from our own teachers during our time in school. Unfortunately, many of these methods have been shown to be ineffective, or there is no data to support their effectiveness. The solution is to be sure we are using EBPs in our classroom instruction.

The use of EBPs is mandated by the Every Student Succeeds Act (ESSA) and the Individuals with Disabilities Education Act (IDEA). These federal laws require teachers to use, to the greatest extent possible, academic and behavioral practices and programs grounded in scientifically based research. In addition to legal considerations, EBPs significantly increase the prospects of student achievement and learning. Some of the benefits of using EBPs are:

- Increased likelihood of positive student mathematics outcomes
- Increased accountability because there are data to back up the selection of a practice or program, which in turn facilitates support from administrators, parents, and others
- Less wasted time and fewer wasted resources because educators start off with an



effective practice or program rather than attempting to select one through trial-and-error

- Increased likelihood of being responsive to learners' needs
- Higher probability of convincing students to try a practice or program because there is evidence that it works

Spectrum Academy expects teachers to implement EBPs with fidelity. When fidelity is not adhered to, it often leads to the belief that the practice or program is ineffective, resulting in discontinuation or a switch to something else (O'Connor, Small, & Cooney, 2007). *“Research indicates that one of the most common reasons that educators do not get the results they anticipate is that they have not properly implemented the practice or program. To avoid this problem, and to get better results from the EBPs, educators need to understand the importance of implementing them as intended [emphasis added]”* (The IRIS Center, 2017).

The implementation of a practice or program, as intended by the researchers or developers, is referred to as fidelity of implementation. This is also commonly referred to as treatment integrity, procedural fidelity, intervention integrity, procedural reliability, or procedural adherence. Generally, to implement a practice or program with fidelity, one should:

- Understand how to implement the EBP as intended
- Gather and organize the resources necessary for implementation
- Adhere to the implementation procedures of the practice or program
- Adherence—Following the instructional procedures of the practice or program as they were intended and implementing all components of the EBP in the correct order
- Exposure/duration—Implementing the practice or program for the recommended:
 - Length of session (e.g., 40 minutes)
 - Duration of EBP (e.g., 12 weeks, one semester, one academic year)
 - Frequency (e.g., daily, three times per week)



- Quality of delivery—Delivering the EBP using good teacher practices (e.g., implementing with enthusiasm, making time for student questions and feedback, managing transitions)

At Spectrum Academy, careful consideration has gone into providing research-based instructional materials and schedules, EBPs, and assessments for our unique population of students. Our EBPs for Mathematics are:

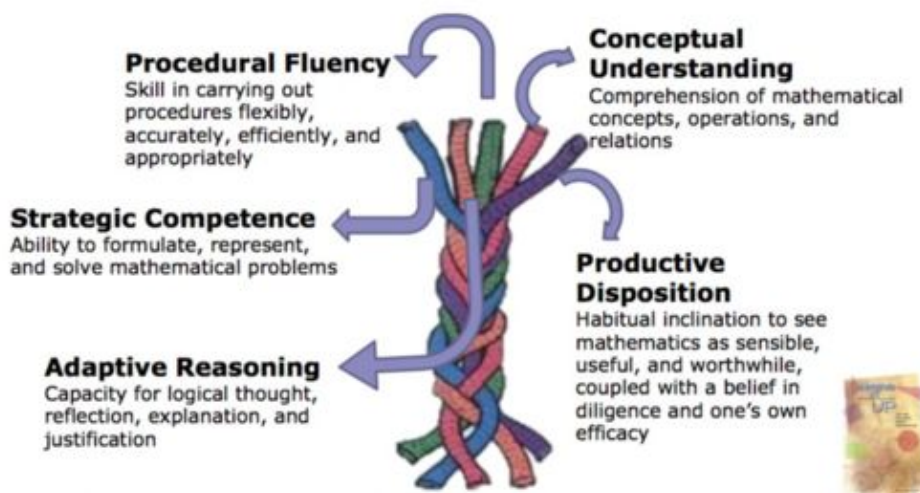
- [Explicit, systematic instruction](#)
- [Visual representations](#)
- [Schema instruction](#)
- [Metacognitive strategies](#)

Evidence-Based Practice	Definition
Explicit, systematic instruction	This strategy involves teaching a specific skill or concept in a highly structured and carefully sequenced manner.
Visual representations	This strategy involves creating an accurate representation of the mathematical quantities and relationships described in the problem, sometimes referred to as a <i>schematic representation</i> or <i>schematic diagram</i> .
Schema instruction	This strategy involves teaching students the underlying structure, or <i>schema</i> , of word problems and giving them a method for solving that problem type.
Metacognitive strategies	These strategies enable students to become aware of <i>how</i> they think when solving mathematics problems. More specifically, metacognitive strategies help students learn to plan, monitor, and modify their mathematical problem-solving approach.

In compliance with Utah Code, [53E-3-521](#), Spectrum Academy formulates an Early Learning Plan for mathematics proficiency and improvement for grades K-3 which includes the following areas:

- [Conceptual understanding](#)
- [Procedural fluency](#)
- Strategic and adaptive mathematical thinking (separated in the image below)
- [Productive disposition](#)

The Five Strands of Mathematical Proficiency



Teachers at Spectrum Academy receive training on all of these areas and ongoing coaching.

Many of our students struggle with math for a variety of reasons, including having learning disabilities. Compared to the overall population, a much smaller percentage of students with disabilities demonstrate proficiency in mathematics. Although every learner is unique, students with a mathematics learning disability (MLD) tend to display any of a number of characteristics that affect their mathematics performance, including:

- Difficulty processing information
- Difficulty identifying relevant information in mathematics problems, especially in word problems
- Difficulty translating information into a mathematical expression or equation
- Problem maintaining attention
- Difficulty selecting an effective problem-solving strategy
- Poor reasoning and problem-solving skills



- Working through a problem without making sure all steps are completed or that the answer makes sense
- Deficits in the areas of mathematics facts and computational skills
- Memory and vocabulary difficulties
- Difficulty solving multi-step problems
- Weak visual/spatial representational skills
- Difficulty reading about mathematics
- Difficulty understanding the language, or vocabulary, of mathematics
- Difficulty understanding mathematics concepts and how concepts relate to procedures
- Mathematics anxiety
- Learned helplessness—that is, having low motivation, being a passive learner, and attributing both successes and failures to external, uncontrollable factors (e.g., luck)

In order to facilitate student acquisition of essential core math skills, Spectrum Academy teachers will receive training on and be asked to implement the following research-based practices (Gersten, et.al., 2009):

- Teach students using explicit instruction on a regular basis
- Teach students using multiple instructional examples
- Have students verbalize decisions and solutions to a math problem
- Teach students to visually represent the information in the math problem
- Teach students to solve problems using multiple/ heuristic strategies
- Provide ongoing formative assessment data and feedback
- Provide peer-assisted instruction to students

Administration will ensure that the following guiding principles are implemented to enable teacher and student success:

1. Teaching & Learning: Effective teaching that engages students in meaningful learning through experiences that promote their ability to make sense of mathematical ideas and reason mathematically.
2. Access & Equity: All students have access to a high quality mathematics curriculum, effective teaching and learning, high expectations, and the support and resources needed to maximize their learning potential.
3. Curriculum: The use of a curriculum that has coherent learning progressions and develops connections between mathematical concepts and the real world.
4. Technology: Effective integration of technology as a tool to help students learn and make sense of mathematical ideas and reasoning, and communicate their thinking.
5. Assessment: Ensure assessment is an integral part of instruction and is used to provide evidence of proficiency to inform necessary changes to instruction.
6. Professionalism: Promote a culture of accountability where educators and colleagues hold themselves accountable for mathematic success of every student and for the professional growth toward effective teaching and learning.



Research Shows

- Students who use accurate visual representations are six times more likely to correctly solve mathematics problems than are students who do not use them. However, students who use inaccurate visual representations are less likely to correctly solve mathematics problems than those who do not use visual representations at all.
(Boonen, van Wesel, Jolles, & van der Schoot, 2014)
- Students with a learning disability (LD) often do not create accurate visual representations or use them strategically to solve problems. Teaching students to systematically use a visual representation to solve word problems has led to substantial improvements in math achievement for students with learning disabilities.
(van Garderen, Scheuermann, & Jackson, 2012; van Garderen, Scheuermann, & Poch, 2014)
- Students who use visual representations to solve word problems are more likely to solve the problems accurately. This was equally true for students who had LD, were low-achieving, or were average-achieving.
(Krawiec, 2014)

The Institute of Education Sciences (Gertsen, et.al., 2009) recommends the following for ensuring appropriate mathematics intervention is implemented:

1. Screen all students to identify those at risk for potential mathematics difficulties and provide interventions to students identified as at risk.



2. Instructional materials for students receiving interventions should focus intensely on in-depth treatment of whole numbers in kindergarten through grade 5 and on rational numbers in grades 4 through 8. These materials should be selected by committee, headed by the Academic Achievement Specialists.
3. Instruction during the intervention should be explicit and systematic. This includes providing models of proficient problem solving, verbalization of thought processes, guided practice, corrective feedback, and frequent cumulative review.
4. Interventions should include instruction on solving word problems that is based on common underlying structures.
5. Intervention materials should include opportunities for students to work with visual representations of mathematical ideas and interventionists should be proficient in the use of visual representations of mathematical ideas.
6. Interventions at all grade levels should devote about 10 minutes in each session to building fluent retrieval of basic arithmetic facts.
7. Monitor the progress of students receiving supplemental instruction and other students who are at risk.
8. Include motivational strategies in tier 2 and tier 3 interventions.

Flexible Grouping Practices (Included in Tiers PD)

Flexible grouping helps engage students and facilitates the acquisition of mathematics skills. In addition to whole-group instruction, teachers will be trained to use a combination of:

- Small groups (both of same ability and of mixed ability)
- Paired instruction
- Independent work
- One-on-one instruction (if needed and possible)

Spectrum Academy uses the following model for K-8 instructional Grouping: (think @ 9-12)



First 30 Minute Rotation M-W-F			
<u>Instructions for Para</u> Group A: Explicit Instruction w/curriculum Group C: Monitor students at independent station	Para Group A <hr style="border-top: 1px dashed black;"/> Independent On-line Program Group C	Teacher Group B <hr style="border-top: 1px dashed black;"/> Independent On-line Program Group D	<u>Instructions for Teacher</u> Group B: Explicit Instruction w/curriculum Group D: Monitor students at independent station
2-3 Minute Sensory Break			
<u>Instructions for Para</u> Group B: Explicit Instruction w/curriculum Group D: Monitor students at independent station	Para Group B <hr style="border-top: 1px dashed black;"/> Independent On-line Program Group D	Teacher Group A <hr style="border-top: 1px dashed black;"/> Independent On-line Program Group C	<u>Instructions for Teacher</u> Group A: Explicit Instruction w/curriculum Group C: Monitor students at independent station
Second 30 Minute Rotation M-W-F			

First 30 Minute Rotation T-TH			
<u>Instructions for Teacher</u> Group A: Explicit Instruction w/curriculum Group C: Monitor students at independent station	Teacher Group A <hr style="border-top: 1px dashed black;"/> Independent On-line Program Group C	Para Group B <hr style="border-top: 1px dashed black;"/> Independent On-line Program Group D	<u>Instructions for Para</u> Group B: Explicit Instruction w/curriculum Group D: Monitor students at independent station
2-3 Minute Sensory Break			

<u>Instructions for Teacher</u> Group B: Explicit Instruction w/curriculum Group D: Monitor students at independent station	Teacher Group B	Para Group A	<u>Instructions for Para</u> Group A: Explicit Instruction w/curriculum Group C: Monitor students at independent station
	Independent On-line Program Group D	Independent On-line Program Group C	
Second 30 Minute Rotation T-TH			

The following chart outlines the assessments used and timeline for making instructional decisions and tiered placement for students.

Gr. K-2	Type of Assessment	Assessment	Instructional Decisions
MAT H	Standardized	enVision	1. Beginning 6-weeks after BOY benchmark assessments, Spectrum Academy uses current data to monitor progress: <ol style="list-style-type: none"> Red benchmark = Progress monitor every 2 weeks Yellow benchmark = Progress monitor every 3 weeks Blue/Green benchmark = Progress monitor every 4 weeks. 2. If triangulation data matches and the student is progressing = continue current Tier I instruction 3. If triangulation data matches and the student is not progressing = introduce Tier 2 curriculum with Additional RTI Time <i>(Continue Tier I instruction)</i> If after 4-6 weeks the student's data shows progress then continue instruction. If after 4-6 weeks the student's data is still not showing progress, introduce Tier 3 curriculum. <i>(Continue Tier I instruction)</i> 4. If triangulation of data does not match look for reasons: <ol style="list-style-type: none"> Timed vs. Untimed
	Curriculum-based		
	Standards Based Assessments	CCSS	
	Computer / Independent	iReady	
Gr. 3-6	Type of Assessment	Assessment	

MAT H	Standardized	enVision	<ul style="list-style-type: none"> b. Monitored vs. Independent c. Processing Speed d. Issues such as Anxiety <p>5. <u>After MOY Acadience Reading</u> benchmark assessments, Spectrum Academy uses current data to monitor progress:</p> <ul style="list-style-type: none"> a. Red benchmark <u>OR</u> “below/well-below pathways progress” = Progress monitor every 2 weeks b. Yellow benchmark <u>OR</u> “typical pathways progress” = Progress monitor every 3 weeks c. Blue/Green benchmark <u>OR</u> “above/well-above pathways progress” = Progress monitor every 4 weeks.
	Curriculum-based	CCSS	
	Standards Based Assessments	iReady	
	Computer / Independent		
Gr. 7-8	Type of Assessment	Assessment	
MAT H	Standardized		
	Curriculum-based	enVision	
	Standards Based Assessments	CCSS	
	Computer / Independent	iReady/IXL	
Gr. 9-12	Type of Assessment	Assessment	
MAT H	Standardized		
	Curriculum-based	enVision	
	Standards Based Assessments	CCSS	
	Computer / Independent	IXL	



Tier II: Targeted Interventions

Entry Criteria: Student performing below or well-below benchmark after 6-8 weeks of Tier I instruction, or if continuing on Tiers II or III from the prior year.

Procedures:

1. Coach performs math diagnostic [interview](#)
2. Coach works with teacher to formulate instructional plan

Coaches and principals ensure fidelity with implementation of the following:

Organizational Factors	Tier 2	Tier 3
Extra time allotted for instruction	30 minutes, 4 days a week	30 minutes, 4 days per week
Instructional grouping	4-5 students	1-3 students
Duration of intervention	Until student scores at or above benchmark for three consistent progress monitoring probes.	Until student scores at or above benchmark for three consistent progress monitoring probes.
Interventionist facilitating group	General education teacher, intervention specialist	Intervention specialist, content specialist, special education teacher
Assessment Factors	Tier 2	Tier 3
Level of diagnostic assessment	Group diagnostic assessment	Individual diagnostic assessment
Intensity of progress monitoring	Biweekly	Weekly
Assessment /data framework For CST and CTT	Group-level RIOT/ICEL Description of RIOT/ICEL	RIOT/ICEL Description of RIOT/ICEL
Instructional Factors	Tier 2	Tier 3
Opportunities to Respond (or other high-Impact strategy)	Ensure at least 6-8 OTRs/minute	Ensure at least 8-12 OTRs/minute



Ongoing Instructional Coaching	Coaches meet with teachers weekly	Coaches meet with teachers twice weekly
Instructional Focus	Use of core and supplemental programs with support of reteaching and Review Group-level needs	More strategically structured, remediation intervention programs Individual-level needs
Behavioral expectations	Provide more structured systems to reinforce and correct challenging behavior	Use functional behavioral assessment to plan and individualized intervention
Amount of review and repetitions	Review and practice of core concepts taught in Tier 1	More intensive practice of core and remediation content More time spent reviewing and practicing
Error Correction	Prompt students to correct errors	Provide direct error correction procedures
Scaffolding	Utilize “I do, we do, you do together” framework	Provide more intensive guided practice during “we do”

Curriculum & Materials

Spectrum Academy uses the Common Core State Standards (CCSS) in all subject areas for its core curriculum. Instructional materials have been selected very carefully based on research and past success with student growth. The following table outlines the core instructional materials that will be used at each grade level for each tier with details following.

Grade	Math Tier 1 Small or Whole Group depending on student need	Math Tier 2 Small Group	Math Tier 3 1:1 / Small Gr.
--------------	--	--	--



K-3	enVision	enVision/Number Worlds	enVision/Number Worlds
4-6	enVision	enVision/Number Worlds	enVision/Number Worlds
7-8	enVision	enVision/Number Worlds	enVision
9-12	enVision	enVision	enVision

Tier I Math Program Descriptions

enVision Mathematics

Spectrum Academy began using *enVision Mathematics* in August 2020. *enVision Mathematics* is based on a research foundation and has shown to be proven effective by statistically significant advantages (Resendez, M., et.al., What Works Clearinghouse). *enVision Math* is organized into clusters, topics and lessons that are all centered around the Common Core Standards for Mathematical Content. *enVision Math* was created with the knowledge that a concept in mathematics is understood when “one can connect that idea to previously learned ideas” (Savvas Learning Company). Because of this principle, *enVision* allows for cross-cluster connections within topics so students can make connections throughout the grade.

enVision Mathematics has a two step core instructional model to promote understanding. First, new concepts are introduced using a problem-based teaching and learning approach. Problem-based learning is considered by many researchers to be the most innovative instructional method for teaching mathematics instruction. (Hung, W., Jonassen, D. H., & Liu, R. 2008) In *enVision* this problem-solving approach is called *Solve and Share*. Students are asked to solve a real world problem which involves utilizing a new concept or procedure. These *Solve and Share* problems are encouraged to be solved with a peer or a group of students. Allowing students to problem solve together and eventually come to a solution, is a great way to promote



cross-curricular learning and gives the students an opportunity to use the social and self-regulation skills they were previously taught.

After students have completed the problem-based learning portion of the lesson, the next step is to “make the important mathematics explicit with enhanced direct instruction connected to Step 1” (Savvas Learning Company). The “important mathematics” is the new concept that students should learn in that lesson. After the *Solve and Share* problem, every lesson in *enVision Mathematics* includes a worked-out problem. This allows students to connect the ideas they generated in the problem-based learning portion of the lesson to the important mathematics through the use of *Visual Learning Bridges* and *Visual Learning Animation Plus* videos.

enVision Mathematics lessons are designed around three main principles: focus, coherence and rigor. Throughout each lesson and topic, there are Essential Questions to help the teacher focus their instruction to allow for a “deeper dive” into the content. *enVision Mathematics* achieves coherence across grade levels through learning progressions. Once a student is exposed to a new idea, they can be assured that they will “spiral” around to that idea again within that year as well as following years. In the Lesson Overview, teachers can “look back” and “look ahead” to determine connections between previously taught skills and allow for previews of future skills. Lastly, each lesson is designed with an attention to rigor. This is balanced through the use of conceptual understanding, procedural skill and fluency, and application. (Savvas Learning Company)

Within each lesson, there are specific practices in place to help the teacher provide intervention and differentiation at a Tier I level. During the Guided Practice portion of the Direct Instruction, there is an error intervention section where the teacher can provide on the spot targeted instruction. Another example of ongoing Tier 1 interventions that are offered in each lesson are the reteaching sets that are available for teachers and students to complete before they begin their independent practice. Through the use of professional development trainings and pre-recorded videos from coaches, all teachers have the knowledge and skillset to provide these quick interventions during a lesson.



Tiers II & III Approved Instructional Materials

	Materials	
Grade(s)	Tier II	Tier III
K-8	enVision/Number Worlds	enVision/Number Worlds
9-12	enVision	enVision

Tiers II & III Math Program Descriptions

enVision Mathematics

Built into the existing *enVision Mathematics* curriculum, are resources for Tier II and Tier III interventions.

The Tier II interventions are designed to happen at the end of each lesson. This allows the student to still receive access to their grade level instruction and the same support and resources that all students received in the general Tier I instruction. These are strategic interventions that are implemented in a small group setting by the teacher or paraprofessional. These interventions are a mix of print and digital resources which allow the student to access the intervention in the modality that best fits their needs. Online, there are many math games and math tools & activities. These interactive games and activities, allow the student to access the interventions while fulfilling sensory needs.

Print resources include teacher led activities as well as student led projects. A few of these resources involve cross-curricular activities to promote mathematical literacy and STEM activities. The *enVision Math* STEM activities can be completed as individual assignments or in a group. These activities, which are supervised by the teacher or paraprofessional, provide ways for students to build their mathematical skills while utilizing STEM knowledge. Another print resource that is offered, are the “intervention activities” which are led by a teacher to any struggling students. These activities are typically multi-modal which provide greater interest to the students.

enVision Mathematics also offers many Tier III interventions for all students which can



be delivered as needed. These interventions are found in the Math Diagnosis and Intervention System (MDIS) that encompasses grades K-8. The MDIS is designed to “help diagnose students’ needs and provide effective intervention that’s on or below grade level” (Savvas Learning Company). First, the student must complete an assessment that will help determine where they should begin the Intervention System. Incorporated in the assessments, are item analysis charts that tie each question to a Common Core Standard, the corresponding Depth of Knowledge (DOK) for that item, and the topic, lesson and worksheet that is available to provide intensive intervention on that skill. Each lesson in the MDIS comes with a lesson plan for the teacher that focuses on vocabulary, concept development and practice. The teacher can provide these lessons 1:1 with a student that needs intensive intervention.

SRA Number Worlds

SRA Number Worlds is a pre-K to grade 8 prevention and intervention mathematics curriculum. All units in *Number Worlds* are rooted in the Common Core State Standards. Students that need Tier II intervention can follow the *Number Worlds* Intervention Chart and spend time in a small group or with a teacher learning a specific concept. Once that skill is mastered, the student can be quickly reintegrated back into their core instructional program. According to *Number Worlds*, students that require more substantive intervention (Tier III), will most likely complete the entire curriculum at their level with significant teacher support.

Every lesson in *Number Worlds* follows a 4 part structure: warm up, engage, reflect and assess. The warm up activity encourages students to use previously taught skills to solve a real-world problem. Next, the students learn key math concepts through the use of games and activities which is the foundation on which *Number Worlds* is known. Third, students reinforce their understanding of new math concepts by completing a writing or discussion activity. Last, built into each lesson are progress monitoring assessments (both formal and informal) that teachers use daily to make decisions about further intervention. (McGraw Hill)

For these lessons to be implemented effectively and with fidelity, *Number Worlds* has created three possible models that teachers can follow depending on their instructional timeframe as well as the level of intervention that is necessary. These models are divided into 30 minute, 45



minute and 60+ minute schedules. Each week will follow a 5 day lesson plan where days 1-4 are focused on instruction and day 5 is reserved for assessment and project-based learning.

Goals, Objectives, and Pupil Performance Standards

Overall Performance

In addition to its charter goals, Spectrum Academy adopts the overall goals of the USBE which are:

1. Early Learning: Each student starts strong through early grades with a foundation in literacy and numeracy
2. Personalized Teaching & Learning: Each student and educator has access to personalized teaching and learning experiences
3. Safe & Healthy Schools: Each student learns in a safe and healthy school environment
4. Effective Educators & Leaders: Each student is taught by effective educators who are supported by effective school leaders

Therefore, the following objectives will serve as guidance in achieving the USBE and Spectrum Academy's instructional goals and will inform the work of our instructional staff:

Objectives

1. Ensure all students demonstrate achievement of the Utah Common Core (UCC) and receive appropriate services and instruction.
2. Ensure students and instructional personnel use curriculum, assessments, and the tools of technology aligned with district curriculum as the basis for the teaching and learning process.



3. Ensure staff learning results in increased student achievement and increased organizational efficiency and effectiveness.
4. Ensure efficiency and high performance through the use of MTSS policies and procedures.
5. Ensure staff, community, and parent/family involvement focuses on increased student achievement.
6. Ensure all students and staff have a safe, respectful, and orderly school environment that supports student achievement.
7. Ensure a workforce that is diverse, highly qualified, skilled, and committed to the district's values and to the achievement of all students.
8. Ensure the most effective use of resources.
9. Ensure a sound financial position.
10. Ensure consistent, timely, and accurate information to all employees and community members to promote effective two-way communication.
11. Ensure all employees demonstrate the district values of teamwork, integrity, exemplary performance, and valuing people.

Specific Performance

Academic performance goals are listed that would align with our School receiving a “meets” or “exceeds” rating on the School Report Card.

Academic Performance Goals: Required Assessments Spectrum Academy intends to comply with all assessment reporting requirements of the state.



KEEP

Spectrum Academy will increase the percentage of kindergarteners achieving Level 3 performance status in literacy and numeracy from BOY to EOY by 40% by utilizing early intervention instruction and promoting differentiated instruction for all students

Acadience Reading:

By May 31st, 2021, Spectrum Academy will increase the percentage of 1st grade students at or above benchmark on the Acadience Reading composite score from BOY to EOY by 33% through providing ongoing professional development and instructional coaching to all 1st grade teachers, including classroom observations and feedback on the implementation of the explicit phonemic awareness and phonics routines to reduce the percentage of students who did not master PSF and/or NWF and also who are not on benchmark by the end of 1st grade. These students will also receive 45 minutes a week using i-Ready as supplemental instruction and to support their literacy needs.

By May 31st, 2021, Spectrum Academy District will decrease the percentage of 2nd-grade students scoring well-below benchmark on Acadience Reading composite from BOY to EOY by 17% through providing targeted evidence-based interventions, like Sonday, that align to student's diagnostic needs as measured by Acadience progress monitoring and Sonday mastery check assessments, to fill in specific gaps and to improve the percentage of students moving out of well-below benchmark.

RISE

- ELA: Spectrum Academy will annually receive a “meets” or above designation (at least least 60th percentile rank) for each grade
- Math: Spectrum Academy will annually receive a “meets” or above designation (at least least 60th percentile rank) for each grade
- Science: Spectrum Academy will annually receive a “meets” or above designation (at least least 60th percentile rank) for each grade

Utah Aspire Plus



Spectrum Academy 9th and 10th grade students will participate in the Aspire assessment with the following goals.

- English: Spectrum Academy will annually receive a “meets” or above designation (at least 60th percentile rank or mean scale score of at least 431).
- Math: Spectrum Academy will annually receive a “meets” or above designation (at least 60th percentile rank or mean scale score of at least 426).
- Reading: Spectrum Academy will annually receive a “meets” or above designation (at least 60th percentile rank or mean scale score of at least 425).
- Science: Spectrum Academy will annually receive a “meets” or above designation (at least the 60th percentile or mean scale score of 428).

ACT

All Utah public school students take the ACT in 11th grade to assess college readiness. Spectrum Academy students will take the ACT in the spring a year before their anticipated graduation date based on their Individual Education Plan. Spectrum Academy will receive a “meets” rating or above designation for the average Utah ACT composite score by having student scores at or above the 60th percentile.

Academic Growth

Median Growth Percentile

Spectrum Academy views growth as a major factor in determining efficacy of instruction. For all assessments which a median growth percentile can be calculated, we will have a growth percentile of at least 50%. Students who are not proficient will have growth higher than the state average (above the 50th percentile) and students who are proficient will meet their growth percentiles to keep up. This includes all students, regardless of eligibility for free and reduced lunch (FRL), English language learner (ELL) status, or minority status. Strategies for how to achieve this are listed under Educational Program sections of this application.



Student Engagement

Attendance

School attendance can be a struggle for many students on the autism spectrum who suffer from comorbid conditions such as anxiety, depression, trauma, and myriad medical conditions. However, we know that, when absent, students miss vital instruction that has a snowball effect on their continued progress. Spectrum Academy uses research based tools and programs, such as the Safe and Civil Schools Functional Behavioral Assessment of Absenteeism and Truancy, as well as school counselors, to work with families to eliminate the barriers to school attendance. With a continued focus on high attendance, we believe the following goals are attainable.

- Students will have an average daily attendance rate of 87% or higher, as measured by attendance records.
- The sum of total days that students are absent without an excuse across the entire school year will be less than 7% of total required days, as measured by attendance records.

Postsecondary and Workforce Readiness

By year four, we will have students in grade 11 who will participate in the ACT. The goals for this assessment will be as follows.

- ELA: Spectrum Academy will annually receive a “meets” or above designation (at least 60th percentile rank or mean score of at least 18).
- STEM: Spectrum Academy will annually receive a “meets” or above designation (at least 60th percentile rank or mean score of at least 21).

Completion Rates

As required by the IDEA, IEP teams may decide that certain students need to extend their schooling past their 4 year cohort. With that in mind, Spectrum Academy expects to “meet” and/or “exceeds” the high school 4 year cohort completion rate on the School Report Card.

Additional Measures



For students with autism spectrum disorders (ASD), standardized assessments present a host of difficulties. When testing children with ASD, it may be difficult or impossible to adhere to the administration guidelines and still elicit the student's best performance. Tests that are highly dependent on language comprehension, for example, may be biased against students with ASD (Watson & Marcus, 1988). Specifically, tests that require lengthy verbal directions and verbal responses are almost always inappropriate. Even on the performance subtests, receptive language skills are required to understand the directions.

The communication deficit faced by all students with ASD puts them at a disadvantage on tests dependent on receptive and expressive language use. In addition to language skill deficits, students with ASD may lack other skills required in the testing situation. Students with ASD, regardless of level of functioning, possess deficits in social skills. Standardized tests require some level of social interaction. It may be difficult to perform well on an individually administered assessment without reciprocal social interaction skills. Atypical interests, repetitive behaviors, stereotypic behaviors, disruptive behaviors, and inattention may further complicate the testing situation (Blakeley-Smith, Audrey, & Carr, 2009)

Spectrum Academy students will participate in statewide standardized testing, however due to the nature of the disabilities our students have, a single yearly assessment is not the best indicator of academic progress. Thus, the following additional student performance goals, objectives, and accompanying measurement criteria will be used.

Goal	Objective	Measurement Criteria
Improve Student Learning	Students will demonstrate annual improvement in reading and math consistent with instructional standards.	80% of students who are continuously enrolled throughout the school year will score at or above predicted ability/grade level in reading and math as measured by progress monitoring tools that predict student growth based upon initial scores.
Improve Student Learning	Students will be graded on individual mastery of instructional standards.	100% of students will receive progress/report card ratings that are based on individual progress of State Standards/Essential Elements in all core subjects.
Improve Social Skills	Students will demonstrate annual individual progress in social skills.	75% of continuously enrolled students will show individual improvement in social skills as measured by beginning, middle and end of year assessments.
Improve Sensory Processing	Students will demonstrate annual individual progress in sensory integration	75% of continuously enrolled students will show individual improvement in ability to cope with sensory processing differences as measured by classroom data and pre/post sensory integration checklist.
Attendance	Students will attend school regularly.	80% of students will attend school 90% of the time as measured by attendance records.

With all of these goals, objectives and performance standards, Spectrum Academy students are set up with a framework of expectations to meet Adequate Yearly Progress (AYP). The rest of this manual outlines all of the elements that will take place in order for students to realize their maximum achievement potential.

PROGRAM OF INSTRUCTION AND MTSS: MENTAL HEALTH



Spectrum Academy desires that all students have access to programs and services that are matched to their strengths and needs. Our school-based mental health providers (i.e. school counselors, school psychologists, school social-workers) are specially trained in school system functioning and learning, as well as how students' behavior and mental health impacts their ability to be successful in school. Our system of care is a collaborative network of services and supports in each tier that, in partnership with families, is intended to help children do well in school, and successfully live in the community.

Tier I: Universal Supports

- **Universal screeners**
 - SDQ Mental Health Screener
 - Mood Diary
 - CES-DC
- **General health education:**
- **Social skills instruction:** Our mental health specialists deliver lessons in the classroom to all students, collaborate with teachers to deliver lessons based on class needs, and provide support in selecting social skills curricula
- **Drug and alcohol education:** Our mental health specialists deliver lessons in the classrooms as needed/requested, and collaborate with teachers to develop and deliver lessons based on class needs
- **Self-regulation instruction:** Our mental health specialists collaborate with teachers and other related service providers to provide classroom-based lessons targeting emotional and sensory regulation using evidence-based methods and curricula
- **Child abuse training for educators:** Our mental health specialists collaborate with [*Prevent Child Abuse Utah*](#) and the State Board of Education to provide all staff with training on child abuse and neglect



- **Human trafficking training for students, staff, and parents:** Our mental health specialists collaborate with [PROTECT](#) and the State Board of Education to provide all staff and select grades with training on human trafficking. This training is also provided as a resource for parents.
- **Bullying prevention instruction:** Our mental health specialists provide developmentally appropriate monthly lessons for our teachers, to be delivered in each classroom. For classrooms with specific needs, our mental health specialists deliver or co-teach these lessons. Data is collected regarding the effectiveness of each lesson.
- **[SafeUT](#) tip line:** Our mental health specialists participate in awareness campaigns regarding SafeUT, including posting fliers, posters, and magnets in all buildings. We also provide information to parents via email campaigns, and information tables/booths at school events.
- **Child Study Team referral:** Our mental health specialists serve as both a resource and referral source for our Child Study Team. They attend team meetings and provide information about basic interventions, environmental modifications, and resources.
- Parent involvement:** Our mental health specialists encourage parent involvement through Parent Empowerment nights, outreach at school events, and email campaigns.
- **[Suicide](#) awareness and response training** is provided for for all licensed staff every three years
- **Professional development is provided** for all staff addressing mental health needs for students. This training is targeted toward the specific needs of each campus and grade level.

Tier II: Targeted Interventions

All of Tier I supports, and in addition:



- Small group behavioral interventions: Our mental health specialists provide small group, targeted intervention based on student need, on a variety of topics including self-regulation, social skills, and coping strategies.
- Small group mindfulness lessons: Our mental health specialists provide small group, targeted instruction on mindfulness strategies, including meditation, self-awareness, and movement.
- Targeted group sessions by mental health staff: Our mental health specialists provide small group, targeted instruction on topics such as coping strategies, mental health awareness, hygiene, social skills, friendship, and academic access.
- Functional Behavior Analysis of Absenteeism and Truancy: Our mental health specialists work with our teachers, parents, and administrative team to analyze absentee and truancy rates and develop plans to support our families in these areas.
- Functional Behavior Analysis of Bullying: Our mental health specialists use a variety of methods, including data collection/analysis and surveys/questionnaires to determine areas for targeted intervention, both during classroom groups and during small group lessons.
- Community resource navigation for parents: Our mental health specialists attend frequent continuing education and outreach sessions, and maintain relationships with community providers in order to develop and share up-to-date lists of community resources for families.
- Classroom-based interventions: Our mental health specialists provide support in classrooms through evidence based strategies, including direct instruction and environmental modifications.
- Progress Monitoring: Our mental health specialists complete regular progress monitoring through targeted screeners and assessments



Tier III: Intensive Interventions

All of Tier I and II supports, and in addition:

- 1:1 counseling by mental health staff or psychologist: Our mental health specialists provide short-and long-term counseling to our students in compliance with IDEA guidelines.
- Consultation with outside providers: Our mental health specialists are in close contact with community providers in order to provide resources to families, support students and families during the transition between community placements to school, and to ensure continuity of care.
- 1:1 behavioral instruction/interventions: Our mental health specialists work closely with our families and other staff to provide supports that address behaviors in the school. This includes crisis intervention, processing after a behavior occurs, instruction on staff responses, staff support during and after a crisis situation, and collaborating with parents. Our mental health specialists also serve a critical role in the development of Behavior Intervention Plans, in order to ensure that any mental health needs are addressed.
- Critical Support/Safety Plans: Our mental health specialists provide individualized, solution-focused plans that include safety, behavioral, and mental health supports as needed. These plans are drafted with the student and a multitude of supports in order to create set expectations and understanding of a concern or need to the entire IEP team.



Curriculum & Materials

Grade(s)	Topic	Curriculum Materials	Delivered By
Tier I			
K-8	Social Skills	Social Scene Investigations	Teachers
9-12	Social Skills	PEERS	Teachers
K-8	Drug & Alcohol		Teachers
9-12	Drug, Alcohol, Pornography	Fight The New Drug	Outside Provider
K-12	Child Abuse	Prevent Child Abuse Utah	
	Human Trafficking		
	Self Regulation	Zones of Regulation Mindful Schools Learning to Breathe	OT's, Teachers, mental health specialists, behavior specialists, speech therapists
	Bullying	Bully Blockers Boys Town The Virtues Project	Teachers and mental health specialists
Tier II			
K-12	Mental Health Push Ins Classrooms teaching emotion regulation, coping skills, psychoeducation	CBT, DBT, Mindfulness	Mental Health Specialists
Tier III			



K-12	Individual Counseling for emotion regulation, anxiety, depression, other mental health concerns	<p>CBT, DBT, Mindfulness</p> <p>Halloran, M.A. LMHC, J. (2020). <i>Coping Skills for Teens Workbook</i>.</p> <p>Hurley, LCSW, K. (2019). <i>Depression Workbook for Teens</i>.</p> <p>Chansard, PhD, T. (2019). <i>Conquer Anxiety Workbook for Teens</i>.</p> <p>Linehan, M. (2014). <i>DBT Skills Training Handouts and Worksheets, Second Edition</i>.</p> <p>Smith-Adock, S., & Tucker, C. (2017). <i>Counseling Children and Adolescents</i>.</p>	Mental Health Specialists, School Psychologists
K-12	Group Counseling for emotion regulation, psychoeducation, coping skills, social skills	<p>CBT, DBT, Mindfulness</p> <p>Halloran, M.A. LMHC, J. (2020). <i>Coping Skills for Teens Workbook</i>.</p> <p>Hurley, LCSW, K. (2019). <i>Depression Workbook for Teens</i>.</p> <p>Chansard, PhD, T. (2019). <i>Conquer Anxiety Workbook for Teens</i>.</p> <p>Linehan, M. (2014).</p>	Mental Health Specialists, School Psychologists

		<p><i>DBT Skills Training Handouts and Worksheets, Second Edition.</i></p> <p>Smith-Adock, S., & Tucker, C. (2017). <i>Counseling Children and Adolescents.</i></p>	
--	--	---	--

PROGRAM OF INSTRUCTION AND MTSS: BEHAVIOR

The contents of this section provides the materials necessary to assist district and school staff to implement schoolwide, classroom, and research-based positive behavior and emotional supports for achieving important social and learning outcomes. The following tiered supports will be provided as outlined in detail in our [Behavior Support Manual](#)

Tier I: Universal Supports

- School-wide Positive Behavior Interventions and Supports
 - School-wide expectations and procedures taught and reinforced
 - In-depth training for all staff
 - Level system with school store
 - Antecedent interventions
 - Zones of Regulation sensory instruction
 - Processing tools
 - Principal's Club



- Anti-bullying instruction
 - Social skills instruction
 - Data collection and analyzation
- Restorative practices and other alternatives to suspension/expulsion

Tier II: Targeted Interventions

All Tier 1 interventions and in addition:

- CST referral and meetings
- Small group interventions
 - Social skills groups provided by social workers or psychologist
 - Mental health (ie, anxiety) groups provided by social worker or psychologist
 - Behavior instruction provided by behavior specialists
- Behavior contracts or individualized reward systems
- Functional Behavior Assessments (FBA) and Behavior Intervention Plans (BIPs)
- FBA of Bullying
- FBA of absenteeism and truancy
- Classroom Environment Inventories
- Teacher observations
- ALSUP
- Consulting with students' outside providers
- Meet with parents
- Continually review data
- Progress monitor every 2 weeks

Tier III: Intensive Interventions:

All Tier I and II supports and in addition:

- Re-evaluate FBAs and BIPs



- Consult with students' outside providers
- Referral for counseling/school psychologist
- Change of placement meeting
- 1:1 or small group lessons from behavior or mental health specialists using a different curriculum (Superflex, Superheroes)
- Standardized academic and behavioral assessments
- Progress monitor weekly



REFERENCES

- Ancora Publishing: <https://ancorapublishing.com/product/the-third-quest-reading-intervention/>
- Antia, S.D., Kreimeyer, K.H., & Eldredge, N. (1993). Promoting social interaction between young children with hearing impairments and their peers. *Exceptional Children*, 60, 262-275.
- Archer, Anita, L., Hughes, Charles, A. (2011). Explicit Instruction: Effective and Efficient Teaching. The Guilford Press: New York, NY.
- Asia Society (2018). Teaching for Global Competence in a Rapidly Changing World
<http://dx.doi.org/10.1787/9789264289024-en>.
- Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 1(1), 91-97.
<https://doi.org/10.1901/jaba.1968.1-91>
- Baio J, Wiggins L, Christensen DL, et al. Prevalence of Autism Spectrum Disorder Among Children Aged 8 Years — Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2014. *MMWR Surveill Summ* 2018;67(No. SS-6):1–23.
DOI: <http://dx.doi.org/10.15585/mmwr.ss6706a1>
- Bellini, S., Peters, J.K., Benner, L., & Hopf, A. (2007). A meta-analysis of school-based social skills interventions for children with autism spectrum disorders. *Remedial and Special Education*, 28, 153-162.
- Blakeley-Smith, Audrey; Carr, Edward G.; Cale, Sanja I.; and Owen-DeSchryver, Jamie S. (2009). Environmental Fit: A Model for Assessing and Treating Problem Behavior Associated with Curricular Difficulties in Children with Autism Spectrum Disorders. Peer Reviewed Articles. 38. https://scholarworks.gvsu.edu/psy_articles/38
- Center on Positive Behavior Interventions and Supports (CPBIS):
<https://www.pbis.org/pbis/tiered-framework>
- Chard, D. J., Vaughn, S., & Tyler, B. J. (2002). A synthesis on effective interventions for



- building reading fluency with elementary students with learning disabilities. *Journal of Learning Disabilities*, 35, 386-406.
- Colorado Department of Education (2020). Retrieved from:
http://www.cde.state.co.us/cdesped/mtssfscp_implementationguide
- Collier-Meek, M. A., Fallon, L. M., Sanetti, L. M., & Maggin, D. M. (2013). Focus on implementation: Assessing and promoting treatment fidelity. *TEACHING Exceptional Children*, 45(5), 52–59.
- Council for Exceptional Children (2011). Evidence-based practice: Wanted, needed, and hard to get. Retrieved from: <http://www.bridges4kids.org/articles/2006/8-06/cec8-06.html>
- Davis, D. (2014). Fidelity of implementation, teacher perspectives and child outcomes of a literacy intervention in a head start program: A mixed methods study. In *Open Access Theses and Dissertations from the College of Education and Human Sciences*. Retrieved from: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1203&context=cehdsdiss>
- De Fazio, C. M., Fain, A. C., & Duchaine, E. L. (2011). *Using treatment integrity in the classroom to bring research and practice together*. Retrieved from:
http://www.aea1.k12.ia.us/documents/filelibrary/special_education_services/behavior_resource_team/Treatment_Integrity_Article_382F2457E806C.pdf
- Dorsey, W. (2015). Balanced Reading Basals and the Impact on Third-Grade Reading Achievement. *Journal of Organizational & Educational Leadership*: Vol. 1(2), Article 2. Available at: <http://digitalcommons.gardner-webb.edu/joel/vol1/iss2/2>
- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, 41, 327–350.
- Dyslexia Handbook (2018). Utah State Board of Education. Retrieved from:
<https://www.schools.utah.gov/file/d4596c5f-0174-47af-ba97-62652d1f6670>
- Frasco, R. D. (2008). Effectiveness of Reading First for English language Learners: Comparison



- of two programs (Doctoral dissertation, Walden University, 2008). *Dissertation Abstracts International*, 69(03A), 141-879.
- Gersten, R., Beckmann, S., Clarke, B., Foegen, A., Marsh, L., Star, J. R., & Witzel, B. (2009). *Assisting students struggling with mathematics: Response to Intervention (RtI) for elementary and middle schools* (NCEE 2009-4060). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc/publications/practiceguides/>.
- Hattie, John. (2012). *Visible learning for teachers : maximizing impact on learning*. London ; New York : Routledge
- Hung, W., Jonassen, D. H., & Liu, R. (2008). Problem-based learning. *Handbook of research on educational communications and technology*, 3(1), 485-506.
- Individuals with Disabilities Education Act (IDEA), 20 U.S.C. § 1400 (2004)
- Kamil, M. L., Borman, G. D., Dole, J., Kral, C. C., Salinger, T., and Torgesen, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices: A Practice Guide* (NCEE #2008-4027). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc>.
- Kamps, D. M., Leonard, B. R., Vernon, S., Dugan, E. P., Delquadri, J. C., Gershon, B., Wade, L., & Folk, L. (1992). Teaching social skills to students with autism to increase peer interactions in an integrated first-grade classroom. *Journal of Applied Behavior Analysis*, 25, 281-288.
- Kaufman, C. (2010). *Executive Function in the Classroom: Practical strategies for improving performance and enhancing skills for all students*. Baltimore: Brooks Publishing.



- Kuypers, L.M., (2011). *The Zones of Regulation*. A curriculum designed to foster self-regulation and emotional control. Social Thinking Publishing
- Lehr, F., Osborn, J., & Hiebert, E. H. (2004). *A focus on vocabulary*. Honolulu, HI: Pacific Resources for Education and Learning. Retrieved from <https://eric.ed.gov/?id=ED483190>
- Marzano, R. (2009). The art and science of teaching: Six steps to better vocabulary instruction. *Teaching for the 21st Century*, 67(1), 83-84. Retrieved from <http://www.ascd.org/publications/educational-leadership/sept09/vol67/num01/Six-Steps-to-Better-Vocabulary-Instruction.aspx>
- McGraw-Hill Education: <https://www.mheducation.com/prek-12/program/wonders-2020/MKTSP-BGA07M0.html>
- McLeskey, J., Barringer, M-D., Billingsley, B., Brownell, M., Jackson, D., Kennedy, M., Ziegler, D. (2017). *High-leverage practices in special education*. Arlington, VA: Council for Exceptional Children & CEEDAR Center.
- Meyer, D. (2011). *The Three Act of a Mathematical Story*. Retrieved from: <http://blog.mrmeyer.com/2011/the-three-acts-of-a-mathematical-story>
- National Center for Education Statistics (2020). *The Condition of Education: Children and youth with disabilities*. Retrieved from: https://nces.ed.gov/programs/coe/indicator_cgg.asp
- National Reading Panel (2000). *Report of the National Reading Panel—Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction*. Washington, D.C.: National Institute of Child Health and Human Development.
- Pearson Education:



- <https://www.pearsonschool.com/index.cfm?locator=PS2s92&PMDBSOLUTIONID=6724&PMDBSITEID=2781&PMDBCATEGORYID=806&PMDBSUBSOLUTIONID=&PMDBSUBJECTAREAID=&PMDBSUBCATEGORYID=&PMDBProgramID=143821>
- Pressley, M. (2006). Solving problems in the teaching of literacy. Reading instruction that works: The case for balanced teaching (3rd ed.). Guilford Press.
- Resendez, M., Azin, M., & ALISHA, P. (2008). A Study on the Effects of Pearson's 2009 enVisionMATH Program. Jackson WY: PRES Associates.
- Sanetti, L. M., Fallon, L. M., & Collier-Meek, M. A. (2013). Increasing teacher treatment integrity through performance feedback provided by school personnel. *Psychology in the Schools*, 50(2), 134–150.
- Smith, T. (2001). Discrete Trial Training in the Treatment of Autism. *Focus on Autism and Other Developmental Disabilities*, 16(2), 86–92. <https://doi.org/10.1177/108835760101600204>
- The IRIS Center. (2006). *RTI (part 3): Reading instruction*. Retrieved from <https://iris.peabody.vanderbilt.edu/module/rti03-reading/>
- The IRIS Center. (2014). *Evidence-based practices (part 2): Implementing a practice or program with fidelity*. Retrieved from https://iris.peabody.vanderbilt.edu/module/ebp_02/
- The IRIS Center. (2017). *High-quality mathematics instruction: What teachers should know*. Retrieved from <https://iris.peabody.vanderbilt.edu/module/math/>
- Verhoeven, L., & Snow, C. E. (2002). *Reading for understanding: Toward an R & D program in reading comprehension*. Santa Monica, CA: Lawrence Erlbaum Associates.
- Voyager Sopris Learning: <https://www.voyagersopris.com/literacy/read-well/overview>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Utah MTSS 3-Tier Critical Components Definition (ND). Retrieved from <https://www.schools.utah.gov/file/03b9dbf0-c344-42d2-ac7e-1a5727eacf09>, May 4, 2020.
- Utah State Board of Education (USBE) (2019). Utah's K-12 Literacy Framework. Retrieved



from: <https://www.uen.org/k12educator/downloads/LitFramework.pdf>

Watson L.R., Marcus L.M. (1988) Diagnosis and Assessment of Preschool Children. In:

Schopler E., Mesibov G.B. (eds) Diagnosis and Assessment in Autism. Current Issues in Autism. Boston, MA: Springer.

What Works Clearinghouse. enVisionMATH, Institute of Education Sciences, January 2013.