Lessons from the Field: Using Data to Implement Interventions

Comprehensive, integrated, three-tiered models of prevention (CI3T) are a proactive approach to concurrently meeting the academic, behavioral, and social needs and strengths of individual students. For more information about CI3T models of prevention, see The CI3T Model of Prevention: Supporting Academic, Behavioral, and Social Development of Students at vkc.mc.vanderbilt.edu/ci3t/resources

WHAT ARE THREE-TIERED MODELS?
Three-tiered models of prevention seek to address the diverse needs of students by providing instruction and intervention to promote academic, behavioral, and social success. Tier 1 (primary) support includes academic, behavioral, and social skills instruction that all students receive (e.g., Common Core State Standards, Positive Behavioral Intervention and Supports). In a typical school, about 20% of students will need more than the primary level of support to be successful.

WHAT ARE TIER 2 AND TIER 3 INTERVENTIONS?
Some students will need additional help, beyond the core instruction and support given to all students. About 15% of a typical student population will need Tier 2 (secondary) support, which typically includes small-group or low-intensity instruction and intervention on academic, behavioral, and social needs (e.g., self-monitoring, small-group tutoring). For another 5% of students, the Tier 2 level of prevention may not be sufficient and Tier 3 (tertiary) support is needed. Tier 3 interventions are generally high-intensity, individualized supports, such as counseling, behavioral intervention plans, and academic remediation. Tier 3 interventions should be considered for students who are at high risk for academic or behavioral concerns, or have not made significant improvement with Tier 2 interventions.

WHY ARE MORE INTENSIVE INTERVENTIONS SOMETIMES NEEDED?
The intent of Tier 2 and Tier 3 interventions and supports is to help students gain the knowledge, skills, and strategies to be successful in school. For some students, behavioral and social interventions are needed to help them learn how to successfully interact with peers. For others, academic support is needed to help gain skills in a small group or individualized setting. The goal is to fade students out of more intensive interventions once

<table>
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<tr>
<th>INTERVENTION LEVEL</th>
<th>DESCRIPTION</th>
<th>EXAMPLES</th>
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<tbody>
<tr>
<td>TIER 2</td>
<td>Low to moderate intensity</td>
<td>Self-Monitoring, Lunch Bunches, Small-Group Academic Tutoring</td>
</tr>
<tr>
<td></td>
<td>Typically small groups of students with one adult</td>
<td></td>
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<tr>
<td>TIER 3</td>
<td>High intensity</td>
<td>Behavior Intervention Plans, Individualized Counseling, Cognitive Behavioral Therapy</td>
</tr>
<tr>
<td></td>
<td>Typically individualized, one student with one adult</td>
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For more information about the technical assistance project funded to support schools in your region, please see page 7 of this guide.
POSSIBLE STUDENT DATA TO IDENTIFY NEED FOR ADDITIONAL SUPPORT

<table>
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<tr>
<th>ACADEMIC MEASURES</th>
<th>BEHAVIORAL MEASURES</th>
<th>SOCIAL MEASURES</th>
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</thead>
</table>
| • Academic Screenings  
  – Curriculum-Based Assessments (CBAs)  
  • DIBELS (Good & Kaminski, 2002)  
  • AIMSWeb (Harcourt, 2008)  
  • EasyCBM (Alonzo & Tindal, 2009)  
  – Progress Monitoring/Benchmarking  
  • GPA  
  • Course Failures  
  • ACT/SAT Scores  
  • TCAP (norm-referenced assessment) | • Behavior Screeners  
  – Strengths and Difficulties Questionnaire (Goodman, 1997)  
  – Student Risk Screening Scale (Drummond, 1994)  
  – Systematic Screening for Behavioral Disorders (Walker & Severson, 1992)  
  • Office Discipline Referrals (ODRs)  
  • Suspensions/Expulsions  
  • Attendance | • Behavior Screeners  
  • Social Skills Improvement System (Elliot & Gresham, 2008)  
  • Attendance  
  • Counseling Referrals |

they have acquired the needed knowledge, skills, and strategies. As a result, Tier 1 support and instruction will be sufficient for more students which allows more students to be successful with the school-wide instruction and ultimately creates more streamlined processes for general and special education teachers.

HOW DO YOU DETERMINE WHICH STUDENTS NEED ADDITIONAL SUPPORT?

Many schools use teacher referral to determine which students need additional support and interventions. However, teacher referral alone can be subjective and does not guarantee that all students in need will be accurately identified. Instead, schools should collect and look at academic, behavioral, and social data concurrently. Many forms of data are already required to be collected by district, state, and federal policy, such as academic screening, benchmarks, course failures, grade point average, performance on state assessments, office discipline referrals, suspensions/expulsions, attendance, and tardies.

In addition, some schools also adopt research-validated behavior screeners to proactively identify students at-risk for behavioral difficulties before the difficulties escalate into major challenges or concerns. These screeners (e.g., Student Risk Screening Scale, Strengths and Difficulties Questionnaire) have cut off scores for students at-risk for behavioral difficulties. Current screeners vary in price, time commitment, and the types of behaviors they address.

You should look at multiple data sources when considering students for Tier 2 and Tier 3 support. For example, a below average grade on one assignment does not necessarily merit the need for tutoring, but low grades on multiple assignments over time may indicate the need for small-group tutoring. Similarly, a student who has a bad day socially may not need an intervention, while the student who consistently has peer issues, scores at moderate or high risk on behavior screeners, and/or has had multiple discipline referrals may need to be considered for a Tier 2 support. Look at academic and behavioral data side-by-side when considering interventions for your students. Some students who display academic need may also display behavioral or social need. In this case, pair the student with an intervention that targets academic skills within a social setting (e.g., small-group reading buddies, team-building math club) that encourages social development. You should also examine attendance and tardy data, as many students with internalizing difficulties (anxiety, social fear, bullying victim) will take opportunities to avoid hallways, bathrooms, classes, or even the school as a whole. These students are often overlooked because their difficulties are not externally shown, and they often do not act out in ways that cause them to be noticed by teachers or administration.

“We look at data because we want to know: What are we already doing for kids? And, what are the circumstances that might be affecting their behavior? If you don't use the data, there is no sense in having it.” — Middle School Administrator
HOW DO YOU DESIGN AND IMPLEMENT INTERVENTIONS?

Begin by having your school leadership teams determine which interventions already exist in your school, and then determine which are classified as Tier 2 or Tier 3. We encourage you to have open and honest discussions, to ensure all students in your building have opportunities to gain access to needed interventions, regardless of teacher assignment or grade level. School teams can also add additional interventions needed in your school. Once your team determines which interventions are already occurring, explicitly determine the entry and exit criteria for each intervention. This criteria outlines which data sources will be used to determine student eligibility to enter and exit a particular intervention; the criteria should be different for each intervention, and should reflect the needs of your student population. This way, all teachers have the knowledge of what academic, behavioral, and social characteristics to look for among their students.

Consider compiling these interventions in a chart or grid format, where the intervention is listed with a brief description, along with entry criteria, exit criteria, and data to monitor progress. The chart should be explicit, so that any teacher, staff member, or parent could determine whether their student fits the criteria needed to enter or exit an intervention. The chart should explicitly describe all components to (a) ensure all students are considered for entry and (b) to protect individual teacher time from having too many intervention groups. Some Tier 3 interventions are determined by local or federal law, such as Functional Assessment-Based Interventions, which require specific entry criteria. Consult with your administrator (and possibly district-level officials) before finalizing your Tier 2 and 3 charts. See Figure 1 and Figure 2.

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- “We do the Student Risk Screening Scale three times a year. We then look at the data to see what supports we can give a student. The Assistant Principal then takes the Student Risk Screening Scale results and starts filtering students who score in the Tier 2 to Tier 3 range; they meet with the school counselors, STARS counselor, and other administrators and then go through the students by name to figure out where they need to go.”
  ~Middle School Administrator

- “We use behavior data during Response to Intervention data meetings, and the principal shows the data to the superintendent when discussing school scores. It helps us talk about student needs as a grade level and problem solve. It can also help open your eyes to some students who need additional help.”
  ~Elementary School Administrator

The scheduling of interventions will be influenced by the schedules of staff and students involved, as well as by the school district schedule and state/federal guidelines. Interventions should occur at a time that is feasible for the students and adult delivering the intervention. Ideally, interventions would occur during intervention block, free period/study hall (if available), or before or after school. Be sure that student transportation is available if an intervention occurs outside of the normal school day.
**FIGURE 1: HUBBARD WOODS ELEMENTARY SCHOOL TIER 2 (SECONDARY) INTERVENTIONS**

<table>
<thead>
<tr>
<th>SUPPORT</th>
<th>DESCRIPTION</th>
<th>SCHOOL-WIDE DATA: ENTRY CRITERIA</th>
<th>DATA TO MONITOR PROGRESS</th>
<th>EXIT CRITERIA</th>
</tr>
</thead>
</table>
| Small Group Math Tutoring     | • What: Teacher provides additional instruction to small groups of students who have similar academic needs.  
  • Who: Subject area teachers and English language learners teachers  
  • When: Scheduled throughout the school day during grade level intervention time (30 minutes) | • Scoring Basic in math on most recent statewide assessment  
  --AND--  
  • Grade Point Average below 2.0 from previous quarter | • Course Grades  
  • Weekly Curriculum-based Assessments | • Scoring Proficient on next statewide assessment benchmark test  
  --OR--  
  • Increase of Grade Point Average to 2.5 or higher |
| Small Group Math and Social Skills Tutoring | • What: Teacher provides additional instruction to small groups of students who have similar academic and social skills needs. All students will be placed on a behavior contract and point sheet.  
  • Who: Subject area teachers, special education teachers, and English language learners teachers  
  • When: Scheduled throughout the school day during grade level intervention time (30 minutes) | • Scoring Basic or Below Basic in math on most recent statewide assessment  
  --OR--  
  • Scoring in the Below Average Category on benchmarking academic probe  
  --AND--  
  • Scoring Moderate or High Risk on the most recent Student Risk Screening Scale  
  --OR--  
  • 2 Office Discipline Referrals in the previous quarter | • Course Grades  
  • Weekly Curriculum-based Assessments  
  • Office Discipline Referrals  
  • Daily Point Totals | • Scoring Proficient on next statewide assessment benchmark test  
  --OR--  
  • Scoring Average or Above Average on benchmarking academic probe during following screening window  
  --AND--  
  • Scoring Low Risk on Student Risk Screening Scale during next screening window  
  --OR--  
  • Less than 2 Office Discipline Referrals in the quarter |
| Check-In Check-Out⁴          | • What: Daily check-in and check-out with an assigned adult, daily report card on which students have their behavior rated on a Likert scale of 0-2. Point totals are graphed daily and students track their progress toward behavioral goals.  
  • Who: Adults who are designated at the beginning of the year  
  • When: Check-in during arrival, check-out during last 20 minutes of the school day | • Scoring Moderate or High Risk on the most recent Student Risk Screening Scale  
  • 2 Office Discipline Referrals in the previous quarter  
  • 5 or more days absent in previous quarter | • Daily Point Sheet Totals  
  • Office Discipline Referrals | • Less than 2 Office Discipline Referrals in the quarter  
  • Earning 80% of points on Daily Report Card sheets for 5 consecutive weeks  
  • Scoring Low Risk on Student Risk Screening Scale during next screening window |
### FIGURE 2: HUBBARD WOODS ELEMENTARY SCHOOL TIER 3 (TERTIARY) INTERVENTIONS

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<tr>
<th>SUPPORT</th>
<th>DESCRIPTION</th>
<th>SCHOOL-WIDE DATA: ENTRY CRITERIA</th>
<th>DATA TO MONITOR PROGRESS</th>
<th>EXIT CRITERIA</th>
</tr>
</thead>
</table>
| **Functional Behavior Assessment and Behavior Intervention Plan** | • What: Individualized intervention to teach the students a replacement behavior and reduce an undesirable behavior.  
• Who: Behavior support team members work with school-site team  
• When: As needed, when utilized this is a daily, on-going intervention | • Scoring High Risk on Student Risk Screening Scale  
--AND--  
• 3 or more Office Discipline Referrals in previous quarter  
--OR--  
• Meets criteria specified in federal law (IDEA, 2004) | • Target Behavior  
• Replacement Behavior  
• Implementation Fidelity | • Increases in Replacement Behavior  
--AND--  
• Decreases in Target Behavior |
| **Individual Counseling** | • What: Individualized counseling provided by a mental health provider. Students discuss concerns and determine ways to support student.  
• Who: Mental health provider  
• When: As needed and determined by mental health provider | • Scoring High Risk on Student Risk Screening Scale  
--AND--  
• Teacher Referral | • Replacement Behavior  
• Teacher Checklist of Behavior | • Scoring Low Risk on Student Risk Screening Scale during next screening period  
--AND--  
• Continued improvement as noted in Therapist Report and Teacher Checklist |
| **Individual Academic Success Plan** | • What: Individualized academic plan reviewing student’s strengths and weaknesses that will increase academic success in specific areas.  
• Who: Reading and math coaches, Response to Intervention (RTI) interventionists  
• When: As needed, when utilized this is a daily on-going intervention | • Scoring Below Basic on previous year’s statewide assessment  
--AND--  
• Scoring Well Below Average on at least 2 benchmarking academic probes during previous screening window | • Course Grades  
• Weekly Formative Assessments | • Scoring Proficient on next statewide assessment benchmark test  
--OR--  
• Scoring Average or Above Average on 80% of benchmarking academic probe |
"One of the reports we have created generates a list of moderate and high risk students; the list is given to administrators, counselors, and grade level team leaders. Those people look at the list and see if there are overlaps or surprises, and see what is working/not working for those students. At the beginning of Year 2, teachers were given lists of students who were rated in moderate/high risk from the year before so they could anticipate behavior issues ahead of time. At the end of Year 2, they will be using the data to place students in classes for the next year, in order to make sure the risk is evenly distributed."

~Elementary School Teacher

Once you have placed students into the appropriate interventions, it is important to use data to monitor their progress to determine if the intervention is effective for each student. Refer to data which identified the student’s initial need for the intervention and see if he or she is improving. Keep the student in the intervention long enough for an accurate data picture to emerge. If there is no improvement, you can either continue with the intervention to see if the student needs more time in the intervention, or you may want to look at other interventions which may be more effective for that student. Students should be faded out of the intervention once they meet the exit criteria and have mastered the needed skills.

FOR FURTHER READING


ENDNOTES


Individuals with Disabilities Education Improvement Act of 2004.
The Tennessee Department of Education has provided funding to seven projects to provide training and technical assistance to schools as they address the academic, social, and behavioral needs of students within comprehensive, integrated, three-tiered (CI3T) models of prevention. To locate the project assigned to your region, see below.

### UNIVERSITY OF MEMPHIS (RISE):
Dr. William Hunter  
Email: wchunter@memphis.edu  
Phone: 901.678.4932

### UNIVERSITY OF MEMPHIS, LAMBUTH CAMPUS:
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Phone: 901.678.5087

### VANDERBILT UNIVERSITY:
Abbie Jenkins  
Email: abbie.jenkins@vanderbilt.edu  
Phone: 615.343.0706

### UNIVERSITY OF TENNESSEE, KNOXVILLE:
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### MIDDLE TENNESSEE STATE UNIVERSITY:
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### TENNESSEE TECHNOLOGICAL UNIVERSITY:
Dr. Helen Dainty  
Email: hdainty@tntech.edu  
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### EAST TENNESSEE STATE UNIVERSITY:
Dr. Leia Blevins  
Email: blevinsl@etsu.edu  
Phone: 423.439.7547  
or  
Dr. James Fox  
Email: foxj@etsu.edu  
Phone: 423.439.7556