Toward True Integration of Academic and Behavior Response to Intervention Systems
Part Two: Tier 2 Support

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n the previous article in this series, we provided a rationale for integrating aca-
demic and behavior response to intervention (RTI) systems (McIntosh, Good-
man, & Bohanon, 2010). Our rationale included (a) research showing that
challenges in academic and social behavior, interventions, and (b) a description of
the common features that both RTI systems share, and (c) the understanding that
implementing two parallel major systems-change initiatives presents significant chal-
2) when integrating systems:

- the actual interventions may be separate, but outcomes are likely to be
- there are considerably beneﬁts to combining the groups charged with screening
- the processes of screening for both are remarkably similar. Though data sources are different, the decision-
- FBA has been used to distinguish between students who are likely or not
- FBA serves the same function as problem behavior, and monitors the implementation and
effectiveness of Tier 2 interventions are used (McIntosh, Reinke, & Herman, 2009). We contend that support at Tier 2 can be both more effective and efﬁcient when it is strategically integrated.

Shared Features of Tier 2 Support
Like Tier 1 systems, Tier 2 academic and behavior systems share a surprising number of critical features. Tier 2 support is often overseen by a team charged with preref-
erral consultation, screening, and progress monitoring, in addition to actual interven-
tion (Lewis-Palmer, Bounds, & Sugai, 2004). Strategies used in Tier 2 academic and behavior interventions usually include (a) additional instruction and practice, includ-
ing increased feedback on student performance, and (b) increased structure or ex-

cited to increase the probability of success. Additional instruction may include
reteaching of critical skills (“double-dosing” an academic or social behavior lesson)
or teaching lessons at the student’s instructional level, with ample opportunities for
practice and feedback. Examples include repeated reading (Chard, Ketterlin-Geller,
Baker, Doabler, & Apichatrubat, 2009), math ﬂuency timings (Rathvon, 2003), and
teaching or reteaching school-wide expectations or social–emotional skills lessons
(Langland, Lewis-Palmer, & Sugai, 1998).

Increasing structure and explicitness provides students opportunities with high
probability for success (Puesch, 2009). Either the curriculum and instruction or the
physical environment is changed to place students in situations where correct respond-
ing is more likely. In academics, students may be instructed in smaller groups, using
a carefully sequenced curriculum with instruction in conspicuous strategies (Coyne,
Kame’enui, & Carnine, 2007). In behavior, Tier 2 interventions add additional struc-
ture to the school day or challenging routines, often through increased adult or peer
role model contact and/or set routines, such as a check-in/check-out feedback and mentor-
ing intervention (Cone, Hanke, & Horner, 2010).

Integrating Tier 2 Academic and Behavior Support
Though Tier 2 interventions are usually considered stand-alone programs, a true sys-
tem for Tier 2 support includes systems to coordinate recurring tasks regarding who
receives support, what type of support is provided, and how progress is monitored.

At this level, the actual interventions may be separate, but outcomes are likely to be
enhanced by integrating teams. It is useful to consider four common team activities when integrating systems: screening, assessment, intervention, and progress monitoring.

Screening. A critical task for teams is to examine school-wide data to identify which students require Tier 2 support. Whether Tier 2 support is successful in academic or behavior domains often involves curriculum-based measurement (CBM), a collection of measures across aca-
demic domains that have adequate to strong psychometric properties (National Cen-
ter on Response to Intervention, 2010). For behavior, common measures include discipline referrals (ODRs; McIntosh, Frank, & Spaulding, in press) and multiple-gate screening systems (Severson, Walker, Hope-Doolittle, Kratochwill, & Gresham, 2007).

There are considerable beneﬁts to combining the groups charged with screening for academic and behavior challenges into one team. First, the processes of screen-
ning for both are remarkably similar. Though data sources are different, the decision-
making steps are exactly the same: (a) considering both sets of data at the same
time provides advantages beyond examining them separately. For example, when a student is flagged in both areas at the same time, it may indicate a more signiﬁcant
perhaps Tier 3) need that may have otherwise been missed (Reinke, Herman, Petros,
& Ialongo, 2008). In addition, problems in one area may serve as an effective screener for problems in another. Given the low rates of ODRs in kindergarten and prediction of behavior problems from kindergarten reading deﬁcits (McIntosh, Horner, Chard, Boland, & Good, 2006), intensive reading needs can be used as a screener for behavior, picking up behavior needs more quickly. Conversely, when students receive frequent ODRs or suspensions, their classroom instruction is interrupted, signaling the need to monitor academic skills more closely. Finally, using both data sets can help predict problems that are not solely academic or behavioral in nature, such as dropout. Ef-
fective dropout screening involves assessing both data sources simultaneously (e.g.,
ODRs, GPA, and credits toward graduation). Hence, an integrated screening team can identify students more accurately with less time spent.

Assessment. Screening identifies which students need Tier 2 support, but addi-
tional information is often required to select the appropriate intervention. In some
cases, reanalysis of screening data may provide much of this information. For example,
reading benchmark data may indicate whether intervention should focus primarily on
skill acquisition (data indicating low accuracy) or ﬂuency (data indicating accurate but
slow reading rates; Daly, Chafouleas, & Skinner, 2005). Use of ODR data may indicate
whether the student has difﬁculty interacting with peers or teachers and which school
settings should be targeted for additional support (Newton, Horner, Algozzine, Todd,
& Algozzine, 2009). In many cases, however, additional information will improve in-
tervention selection.

One approach that provides a link between academic and behavior support is func-
tional behavior assessment (FBA). The FBA is a process conducted to understand prob-
lem behavior within an environmental context, particularly the events that evoke and
maintain problem behavior (O’Neill et al., 1997). The ﬁnal steps of an FBA are to select
intervention strategies that will prevent problem behavior, teach adaptive skills that
serve the same function as problem behavior, and monitor plan implementation and
effectiveness. This process is an evidence-based practice for individuals with signiﬁcant
disabilities (Carr et al., 1999), and a growing body of research shows the effectiveness of FBA with general education populations (McIntosh, Brown, & Borgmeier, 2008).
Moreover, FBA has been used to distinguish between students who are likely or not
likely to respond to Tier 2 interventions (Chard, Carter & Horner, 2002; McIntosh, Campbell, Carter, & Dickey, 2009).

The FBA process plays a pivotal role in helping teams understand whether inte-
grated academic and behavior support is needed, or if one or the other will suﬃce.
If the function of problem behavior is to obtain or escape social interactions (e.g.,
teacher attention), there may be no academic component needed for an effective intervention (McIntosh, Horner, Chard, Dickey, & Braun, 2008). However, if the function of the problem behavior is to escape academic tasks, an academic intervention is often neces-
sary to improve behavior. In these cases, an academic-only intervention may be more effective for reducing behavior (Filter & Horner, 2009; Preciado, Horner, 
Baker, & Horner, 2009). As such, identifying the likely function of problem behavior is neces-
sary for selecting appropriate Tier 2 interventions.

When integrated teams examine academic and behavior data together, they may
have enough information to complete an eﬃcient FBA (Crone & Horner, 2003).
For example, students receiving ODRs outside of the classroom with a recorded mo-
tivation of obtaining peer attention but without academic challenges (e.g., CBM data
below benchmarks or failing grades) could be perfect candidates for Tier 2 behavior interventions. Students receiving ODRs in the classroom with a recorded deter-
mation of academic and behavior challenges may need additional academic support. Request for assistance forms that include ﬁelds to provide information about events that predict and main-
tain problem behavior can be particularly helpful in intervention selection.

Intervention. Because a fully implemented RTI system includes a range of interven-
tions for Tier 2 support, some additional level of assessment may be necessary to select the most appropriate intervention. As described above, there are predictable challenges that students may face (e.g., academic skill acquisition, ﬂuency, or generalization; low levels of positive interactions), and as a result, schools should have more than one Tier 2 intervention available (McIntosh, Campbell, et al., 2009). Teams can audit their Tier
systems by identifying what interventions are already in place and what student needs each intervention addresses. Then teams can add interventions to fill gaps or eliminate interventions based on redundancy or weak effects (Hawken et al., 2009).

Though it makes sense to integrate Tier 2 teams and data, at this level of efficient intervention, it probably makes sense to continue with separate interventions and only fully integrate when providing an intensive, individualized intervention when response to Tier 2 support is inadequate. Given the weight of Tier 2 academic and behavior interventions available (Fuchs, 2009; Hawken et al., 2009), students can be provided with separate interventions in each area with relative ease.

However, some Tier 2 interventions inherently provide moderate levels of academic and behavior support simultaneously, a benefit for students who need support primarily in one area but could use some assistance in the other. Small group academic interventions provide an excellent opportunity to teach and reinforce prosocial classroom behaviors in a more controlled setting. In addition, students can be reinforced socially for their academic efforts, highlighting an avenue for accessing adult attention in the general education classroom. Likewise, some Tier 2 behavior interventions also provide a modest degree of academic support. Check-in/check-out interventions primarily target classroom behavior, resulting in decreased problem behavior but also increased academic engagement (Hawken & Horner, 2003). Self-monitoring systems, in which students assess their own classroom behavior, often target engagement and direction following, resulting in increased academic engagement and work completion (Todd, Horner, & Sugai, 1999). It is not uncommon for a student’s most pivotal aspect of intervention that must be given attention is fidelity of implementation. Without considering fidelity of implementation, it is unknown whether students fail to respond to Tier 2 support because students have not received the intended support. School teams can take steps to measure and improve fidelity, including the use of direct consultation, intervention scripts, and ongoing observation and performance feedback (Roach & Elliot, 2008). Meeting time devoted to monitoring and improving fidelity of implementation may seem less important than time spent discussing student progress, but it is a valuable and critical investment of resources for all students.

Progress Monitoring. In keeping with the principle of efficiency, most Tier 2 interventions have built-in progress monitoring systems. For example, repeated fluency timings can easily be graphed to show student progress. In the same way, the daily point cards used in check-in/check-out and self-monitoring systems can be graphed to monitor progress. These data can also be shared with students to provide them feedback and enhance their skills in self-monitoring their progress. If systematic data are not produced as part of the intervention process, some system will need to be added to determine response to intervention. Often, data used in screening can be used for monitoring progress (e.g., CBM data). In behavior, direct observation is rarely feasible at Tier 2, and ODRs are not sensitive to daily improvement in performance (McIntosh et al., in press). Recently, direct behavior rating systems and brief behavior rating scales have been proposed as efficient and reliable methods for monitoring student behavior (Chafoules, Volpe, Gresham, & Cook, in press). Regardless of the measures used, it is critical that school teams measure the effectiveness of interventions, even evidence-based interventions, for every student (Kratochwill & Shernoff, 2004).

Measuring response to intervention is generally much easier in academics than behavior. In academics, students have more stable trajectories of growth for decision making. Students who are progressing toward the end of the intervention trajectory are moving toward other students receiving the same level of intervention (Fuchs & Fuchs, 2008). These trajectories can be analyzed to identify whether students are progressing toward important long-term academic outcomes (Kaminski, Cummings, Powell-Smith, & Good, 2008). In behavior, there are few stable trajectories that can be tapped for short-term growth goals. Students should experience some success nearly immediately upon implementation of an effective intervention, but improvement to typical behavior functioning may take time, as new skills must be learned and used regularly to become part of a student’s repertoire. Recently, there has been research in quantifying behavior response to intervention. One method is to count the percent of days meeting a predetermined goal (a percent of possible points earned on a daily point card). Chenery, Flower, and Templeton (2008) examined this metric for analyzing check-in/check-out data and found it an effective and logical measure of response to Tier 2 behavior intervention. Because some students may be successful with Tier 2 support in either academics or behavior but not in the other, measuring progress in both areas is warranted.

CONCLUSION

As noted earlier in this article, support at Tier 2 requires more than simply providing intervention for students. Effective Tier 2 support includes teams systems to manage the tasks needed to identify students, select interventions, implement with fidelity, and determine success with the level of support provided. Most schools have teams to coordinate additional academic and behavior support, though they are often separate and focus mainly on special education eligibility. As a result, they do not have the time to complete these ongoing tasks. Providing high quality Tier 2 support can decrease the eligibility decision-making workload (Goodman, McGlinchevly, & Schalmo, 2010), and integrating these teams provides an opportunity to manage these shared tasks more efficiently.