Intro for Day 2:
Looking at Step One of Problem Solving model—Problem Identification, along with different ways that Tier One data can be used for problem identification.
Perceptions of Skills Survey

Your project ID is:
• Last 4 digits of SS#
• Last 2 digits of year of birth
Advanced Organizer

Day Two—

- Problem Identification
- Tier 1 Data Sources
- Problem Solving Process
  - Step 1: Problem Identification
  - Worksheets/Activities
- Wrap-up/Next Steps
Problem Identification can be approached from different levels—Reinforce the idea that as we identify the problem, we determine whether it is a large group (Tier One) problem, a small group (Tier Two) problem, or an individual student (Tier Three) problem. Can also make the point that positive changes at Tier 1 will increase the efficacy of your intervention efforts at Tiers 2 and 3.

This is a good slide to use for describing the Fish Tank analogy—from Finding Nemo…when the filter was blocked, the water in the tank became dirty, and all of the fish became sick. While we could treat each fish individually (traditionally what we’ve done), it is much more efficient to make sure the water in the tank is healthy, which impacts all of the fish at once. Compare this to the importance of ensuring that we want Tier 1 to be as healthy and robust as possible, before we focus too much time and energy intervening at Tiers 2 and 3.
Remind folks what those three key pieces of data are: 1) expected (benchmark) level of performance, 2) current (student) level of performance, and 3) peer level of performance. You can identify Tier 1 problems in two different ways: look at screening data for the group, or look at individual student performance and then compare with peer performance to identify other students with similar problems. Including peer performance also gives you some sense of the magnitude of the problem.
Let’s look at some graphs….point out the three key pieces of data: **Click 1**: benchmark level of performance, **Click 2**: student level of performance, and **Click 3**: peer level of performance. Ask the group: is this an individual kid problem, or a universal problem? This is an example of an individual kid problem (obviously!), and you can emphasize that we need to make sure that individual kids are struggling for individual kid reasons, and not core problem reasons.
Now we have an example of a universal, or large group problem. Emphasize that teachers don’t maliciously do a bad job of teaching, so the question becomes, “What can we change in this classroom to help more kids be successful?”
Ask the group: How would you intervene in this situation? How to intervene may be less clear. There are two data-based approaches, though. One would be to start with a universal intervention and see how the individual student does in response to that. Another would be to do a universal (class-wide) intervention and also include an individual student intervention with the student who is behind the peer group. In this case, you would be intervening with both the group and the student—but the level of intensity would be greater for the target student. What would NOT be a data-based decision would be to only intervene with the target student and not the peer group.
Florida's PMRN is one of the most sophisticated DIBELS data collection systems in the country. The next series of slides are not intended to be training on the PMRN, but rather to show how it can be used in making data-based decisions.
These are some examples of different data reports that are available through PMRN. They provide different ways of looking at Tier 1 data, allowing us to assess the health of Tier 1—or using our fish tank analogy—the water in the tank.
Direct audience to colorful handout—first page. An “H” on the screen means that they have it in their handout packet. How effective is core curriculum for all students? Give them a minute to look at the data.
How effective is core curriculum for all students? Answer: not very effective at all. Looking at Instructional Level (which is like a composite score) for each grade level, only half or less than half are predicted to meet benchmark on the next administration….Kg=47 %, 1st=50 %, 2nd=49%, and 3rd grade=41%.
They don’t have handouts for next three slides, but the slides illustrate examples of different PMRN data displays for groups of student data. All are examples from first grade of “box and whiskers” data displays. The first slide reflects performance for all of first grade, on the three skills delineated on the slide. The green line represents the target or benchmark. The tan box represents the middle 60% of the student group. The horizontal line in the tan box is the median score for the group. The black vertical lines with short bars represent student scores from 80-95% (top) and 5-20% (bottom). Small black squares, if shown, represent “outliers”—the top or bottom 5%. In this example, the first data set for 1st grade—Phoneme Segmentation Fluency—suggests good performance by the student group—most of the students are above the benchmark. The second box and whisker plot indicates performance that is not good, as in this case, the majority of the students are below benchmark (green line). The third plot is visually less clear, since the median line and the benchmark are the same…but still indicates that 50% percent of the student group are below benchmark.
Still using first grade box and whisker plot data, this slide provides another way of looking at group data. Both “plots” are grade level data, but now included are the outliers, as well as data for an individual teacher (Teacher B)—as noted by the blue diamond. In this case, Teacher B’s class, as a whole, is below benchmark on the first assessment (47% predicted to meet benchmark) and above benchmark on the second assessment (88 % proficient). The box and whisker plots can be compared to the pie charts below each plot.
On this slide, we are drilling down deeper and looking at individual class data (Teacher B) for a particular skill (Phoneme Segmentation Fluency). Looking at results from Assessment 1 and Assessment 2, the class is showing growth and moving in the right direction.
Explain that we are narrowing our focus, and now looking at subgroup data. They have the next slide in their handout packet, and the data is broken down by instructional level for subgroups of students.
This data display breaks down the population into several subgroups, looking at instructional (predictive) level of performance. It allows us to look at subgroup data to determine effectiveness of core program for different groups. Back to the question….How effective is the core curriculum for subgroups of students?....Answer….pretty effective for most subgroups. Ask audience about any particular conclusions they can make.
This slide looks at a specific skill—Phoneme Segmentation Fluency—as opposed to instructional level, and again, allows us to continue drilling down. When determining effectiveness of core for subgroups, caution must be applied when interpreting data that is based on small numbers in different subgroups. Small numbers are less interpretable and may reflect inflated percentages.
Tier I Question

- Which first grade classrooms may require Tier I intervention?

Direct audience back to first handout.
The answer, in this case, is all of the first grade classrooms require Tier 1 intervention, as none have instructional levels at 80%. This is a good time to remind folks that just because our focus is Tier 1, it doesn’t mean that individual students may not need assistance. Point out that an individual student who is not doing well with phonological skills may need to be addressed individually (since the majority of first grade students seem to be proficient in this skill), but a student who is weak in alphabetic principle, may not need individual attention, as this appears to be a large-group, grade level problem, requiring Tier 1 intervention.
Tier I Question

• Which students may require additional intervention?
Again, continuing to drill down. Which **students** may require additional intervention? Answer: every student from “S, Student” and up, given their Recommended Instructional Level. So...is this a Tier 1 problem, or an individual student problem? Answer: Tier 1 problem—there is a large chunk of kids requiring Tier 1 intervention in this situation.
Same question: Which students may require additional intervention? There are several assessments pictured here. Where is your freshest data?? Assessment 4. Looking at data from Assessment 4, which student may require additional intervention? Students C and D. How would you describe the health of Tier 1 at this point? Looks good—so we are in a better position to intervene at the individual student level with students C and D.
Here is an example of how you might collect and display Tier 1 Behavior Data. SWIS (School-Wide Information System) is a data management system designed for behavioral data. Schools who are participating in the Positive Behavior Support (PBS) program have access to this data. If not a PBS school, schools have to apply and pay for this service. The SWIS program organizes Office Discipline Referral (or ODR) data.
The SWIS program is capable of generating many different types of reports of behavioral referral data…per day by month, categories of behavior, location on the campus, time of day, etc.
This graph represents the average number of behavioral referrals per day by month. Ask the audience—which month has the most referrals? (Dec) and which month has the least referrals? (June). Ask them “why”—as generating hypotheses is exactly the thought process we want them to be engaging in. Also—seeking additional information will allow us to tell if the peak in December is due to one or two students being referred frequently, or truly reflective of more students being referred during this month.
This graph depicts ODRs based on Problem Behavior. (M=major). “Disrespect” is at the high end…vs. forgery, alcohol consumption, etc. at the low end (suggesting this might be an elementary or middle school). Is alcohol consumption a Tier 1 problem? No. Is “Disrespect” a school-wide, Tier 1 problem? Possibly. Need additional info—is this the same kid(s) being referred over and over, are these referrals coming from one or two teachers, or teachers from the same grade level? Generating hypotheses and collecting data to support the hypotheses will provide information necessary for how to intervene.
This slide reflects office discipline referrals by location on the campus. Classroom is highest—bus is lowest. What does this suggest? Many elementary schools have a lot of bus problems. It could be that fewer students in this school actually ride the bus. Clearly, the way to intervene is to beef up classroom discipline programs, but again, might want to find out if the majority of the referrals are coming from one class/same teacher.
This slide depicts behavioral referrals by time of day. 10:15 is the peak. Ask them—what’s your hypothesis? Are the kids hungry? Need a break? Need to stretch and get rid of some energy? Remind them that the intervention should match the hypothesis.
Based on the data we’ve been looking at, this is a frequently occurring event—given the month, the behavior, the time of day, and the location. Addressing this problem one student at a time would not address the magnitude of the problem. This would require a Tier 1/school-wide approach.
This is an entirely different scenario. All of the factors are rare occurrences, suggesting this requires a Tier 3/individual student intervention. And it provides a good example that teams don’t always have to have the RtI “triangle” in front of them to make decisions about level of intervention.
NCLB/AYP


- Click on
  - Search School Accountability Reports
  - Choose - AYP, School, county, all years, all grades
  - Continue
  - Choose school
  - Click Submit
  - Click Detailed Report
Exercise

- Review data for your school
- Complete the worksheet
- Identify any Tier 1 weaknesses
Discussion
We’ve been looking at Tier 1 data sources. Now we are going to look more specifically at the first step in the Problem Solving process—Problem Identification.
This slide details examples of levels at which Problem Solving can occur and is also a good reminder that Problem Solving is not just for individual students.
Click 1: This slide takes you through what is provided to students at different tiers. **Click 2:** You begin with universal screening data for some academic area or behavior. This helps you determine which students are performing successfully and which need help. **Click 3:** Based on universal screening data, some students may require additional assessment and intervention. **Click 4/Click 5:** For kids who are proficient at the core level, no additional assessment information is needed, and you can continue with core instruction and monitor progress via grades, classroom performance, universal screenings, summative/yearly tests, etc. **Click 6:** For students in need of supplemental intervention, some additional diagnostic assessment may be needed to help ensure you are addressing the right skill deficit. This does not need to be a formal test. Intervention would be provided in a small group setting, and progress would be monitored approximately monthly, or as appropriate given usual rate of growth and sensitivity of the measurement tool. **Click 7:** If supplemental intervention is not effective enough, then students may require more intensive, individualized interventions. Individual diagnostic testing may yield information to help ensure the most appropriate type/level of intervention, and progress should be monitored more frequently — as appropriate given usual rate of growth and sensitivity of the measurement tool.
A review of the four-step Problem Solving model, to provide context for Step One.
This slide provides additional details of what is included in the Problem Solving steps—essentially, using data to make decisions, figuring out why a problem is occurring, developing an intervention, and then determining response to the intervention---how is the student doing?
Steps in the Problem-Solving Process: Problem Identification

1. PROBLEM IDENTIFICATION
   - Identify replacement behavior
   - Data - current level of performance
   - Data - benchmark level(s)
   - Data - peer performance
   - Data - GAP analysis

Defining a problem as the discrepancy between expectation (benchmark, goal, etc.) and current level of performance allows us to be more objective and makes it easier to identify a replacement behavior. Looking at both benchmark data and peer group data can give you a better idea as to the magnitude of the problem.
In Problem Identification, replacement behaviors are the goals or expectations that we have for students. They are positive statements about what we want kids to be able to do. If a student is blurting out in class, which results in a negative consequence, then the replacement would be sitting quietly, which would elicit a positive response. In order for us to measure progress, replacement behaviors should be measurable, specific, and observable.
Some examples of replacement behaviors. Keep in mind that behaviors like “use appropriate words”, “ask for help”, etc. would need to be specifically defined.
Worksheet on Replacement Behaviors

• Complete individually
• Cross Check with table-mate
• Compare to “answer” sheet
A review of the different pieces of information/data needed for identifying problems. Gap Analysis is computing the gap between Benchmark/Current level of performance. This is a division problem, where you essentially divide Benchmark by Current level. The rule of thumb is that two times the difference (approximately) is reflects a significant gap. Computing the gap between benchmark and peer performance and between peers and target student gives us information about the effectiveness of the core program, and whether it is an individual kid problem, or a larger group problem.

**Data Required for Problem Identification**

- Replacement Behavior
- Current Level of Functioning
- Benchmark/Desired Level
- Peer Performance
- GAP Analysis
Note: the bullets on this slide come in separately—so it takes five clicks to get all of the information up. Depicted are the three pieces of data needed to identify a problem, and an example of how to determine Gap Analysis. For consistency, it might be helpful to have participants go ahead and come up with an appropriate replacement behavior.
This is a graphic representation of the previous slide. The appropriate way to intervene would be to intervene with the target student.
Here is an example using behavior...emphasize the three key pieces of data: current level of performance, benchmark, and peer performance. Again, the gap analysis is a division problem, and in this example, a difference of 1.9 is close enough to two to be considered significant.
Visual representation of previous slide. The appropriate intervention would be a class-wide intervention.
This is an example of Tier 1 behavioral data from two different school years. This is real data from a school with a school-wide discipline plan. Improvement is shown for 06-07, after implementation of a Tier 1 intervention. But emphasize, and ask for hypotheses as to what happened during January and February? What might be going on? Effects of Christmas holidays? Less emphasis on the discipline program mid-year?
This is another display of Tier 1 data—provides percentages and a bar graph of different types of infractions or referrals. What type of infraction might require a Tier 1 behavioral intervention? (Non-compliance, off-task/inattention).
More Tier 1 data, in this case, the report looks at percentages of students referred by subgroup. (% Building=total building population broken down by subgroups and % Referred=percentage of total number of students disaggregated by subgroup referred for behavior). Give participants a minute to look at slide, then ask the question—for which of the groups is the discipline plan inequitable? Really, all of them (except for other, perhaps). The percentage referred should be comparable to the percentage of students represented in the building (may need to define disproportionality). If 50% of the students in the building are male, then roughly 50% of the students referred should be male, not 80%. Fewer white students are referred than should be, given the percentage of the total building population they comprise.
Tier 1 Problem ID handouts needs to be distributed to the group. There are two parts—Handout 1 and Handout 2. Start with Handout 1—read the directions and give them a few minutes to look over the data and the questions and discuss their responses with tablemates. Then discuss the questions as a large group. Emphasize that the three data sets are “snapshots”, and are not progressive—it will help them to look at the data groupings separately, rather than as connected.
Different data sets, but the questions are the same. Have them practice this and then discuss as a large group.
This activity is similar to the two examples they have just worked through, and is designed to assess skills related to Tier 1 Problem Identification. Refer to Skill Assessment Administration Guidelines.
This is the Beliefs Survey post-test. They completed the same survey at the beginning of Day 1. Refer to the Training Survey Administration Guidelines for additional information.
Training Evaluation

No project ID needed
The next two slides provide constructive guiding questions for teams to keep in mind and consider as they move through the PS/RtI process. Consensus will always need to be revisited, and over time, thinking will change. It is recommended that schools/teams consider these questions periodically, to see if school staff is on the same page.

**Important Questions**

- Is this just another way to do child study?
- Have we focused primarily on Tier 3?
- Is our first focus on improving Tier 1?
- Does level and type of instruction vary across grade levels based on student need and performance (e.g., 90 minutes vs 120 minutes of reading/language arts?)
- Do we use data to make decisions all the time?
- Do we have regular data meetings to evaluate student performance?
Important Questions

- Do teachers think that we need to do this stuff and “then we can test the student”?
- Do parents believe that this is a “delay tactic”?
- Do we have expectations for Tier 2 (e.g., Title 1) intervention effectiveness--do we evaluate it?
- Do we monitor students receiving special education services more frequently than all other students?
- Do we really believe that almost all students can achieve state-approved grade level benchmarks?
- Is our continuum of services fully integrated?
Final Thoughts

Problem Solving & Response to Intervention
Resources

Florida Center for Reading Research - http://www.fcrr.org
FCR-STEM - http://fcrstem.org
Behavior - http://flpbs.fmhi.usf.edu
http://www.pbis.org
http://www.swis.org
NCLB - http://www.ed.gov/nclb
