SECTION 5: EVALUATION
OUTLINE

- What is the purpose of the Evaluation?
- How should I depict the target behavior on a graph?
- How do I ensure adequate intervention data is collected and demonstrates level and/or trend under intervention conditions?
- How do I know that the intervention was effective?
- What do I do if the intervention was not effective?
- How can I generalize outcomes to other settings?
- What follow-up strategies do I need?
WHAT IS THE PURPOSE OF THE EVALUATION?

- The purpose of the Evaluation is to provide formative assessment to guide intervention decisions and evaluate the student’s progress toward the specific goals.

- This is the core of data based decision-making.

- Evaluation to identify the impact of the intervention must occur throughout the problem-solving process.

- It is necessary to evaluate outcomes and to monitor progress throughout all stage of the problem-solving model by assessing effects of interventions and making changes when indicated.
### HOW SHOULD I DEPICT THE TARGET BEHAVIOR ON A GRAPH?

<table>
<thead>
<tr>
<th></th>
<th>Effective</th>
<th>Needs Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>□ A single graph is depicted for the target behavior and includes the following elements:</td>
<td>□ A single target behavior is presented on multiple graphs, or relevant graphs are not included.</td>
</tr>
<tr>
<td></td>
<td>□ Baseline data AND</td>
<td>The following components are not included in the graph:</td>
</tr>
<tr>
<td></td>
<td>□ Goal/Target indicator or aim line AND</td>
<td>□ Baseline data OR</td>
</tr>
<tr>
<td></td>
<td>□ Treatment/progress monitoring data with a trend line.</td>
<td>□ Goal/Target indicator or aim line OR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Treatment/progress monitoring data with a trend line.</td>
</tr>
</tbody>
</table>
HOW SHOULD I DEPICT THE TARGET BEHAVIOR ON A GRAPH?

- Data from all phases of the case study are presented on a single graph, including:
  - baseline data
  - goal/target indicator or aim line
  - treatment/progress monitoring data + trend line
How do I ensure adequate intervention data is collected to demonstrate level and/or trend under intervention conditions?

<table>
<thead>
<tr>
<th>5.2</th>
<th>Adequate intervention data (i.e., typically 7 data points) are collected to demonstrate level and/or trend under intervention conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Insufficient data are collected to meaningfully interpret the results of the intervention.</td>
</tr>
</tbody>
</table>
HOW DO I ENSURE ADEQUATE INTERVENTION DATA IS COLLECTED TO DEMONSTRATE LEVEL AND/OR TREND UNDER INTERVENTION CONDITIONS?

- At least 7 data points are collected to meaningfully interpret the results of the intervention.

- The more data per phase collected, the more apparent the behavior pattern is; enough data must be collected per phase in order to summarize the nature or pattern of the behavior.

- Intervention length should be determined by effectiveness and growth according to goal lines.

- Intervention should be constantly monitored for effectiveness and altered to account for progress towards goal and lack of progress.
How Do I Know That the Intervention Was Effective?

<table>
<thead>
<tr>
<th>5.3</th>
<th>Visual analysis of the level, trend and variability and/or statistical analyses (e.g., effect size) demonstrate that the intervention was effective.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Visual or statistical analyses were not used OR The Intervention was ineffective.</td>
</tr>
</tbody>
</table>
HOW DO I KNOW THAT THE INTERVENTION WAS EFFECTIVE?

- Use outcome and fidelity data to determine whether or not the intervention has resulted in a reduction in the performance gap and a resolution of the problem.
- Ask yourself “Did the plan work?”
- Calculate effect size (statistical analysis)
- Evaluate level, trend, and variability of the graph

Review:
  a) Data on progress toward the stated goal
  b) Level of current discrepancy from the desired outcomes
  c) Level of resources needed to maintain or increase student outcome based on progress monitoring data
HOW DO I KNOW THAT THE INTERVENTION WAS EFFECTIVE?

o Horner, Carr, Hall, McGee, Odom, & Wolery (2005) stated visual analysis involves interpretation of the level, trend, and variability of performance occurring during baseline and intervention conditions.

o Level refers to the mean performance during a condition (i.e., phase) of the study.

o Trend references the rate of increase or decrease of the best-fit straight line for the dependent variable within a condition (i.e., slope).

o Variability refers to the degree to which performance fluctuates around a mean or slope during a phase.
HOW DO I KNOW THAT THE INTERVENTION WAS EFFECTIVE?

- Progress monitoring data are demonstrated to be effective when compared to baseline (and other) data.
- Must use the same measures in order to make appropriate comparisons to baseline data.
WHAT DO I DO IF THE INTERVENTION WAS NOT EFFECTIVE?

- If student made no progress at all
  - Cycle through the entire problem-solving process to be sure that correct problem was identified

- If limited progress made
  - Was intervention delivered as designed?
  - Is intervention powerful enough to address the problem?
    - Increase intensity, frequency, layers of support
  - Initial goal was too ambitious and intermediate goal setting is needed to allow student to eventually reach the goal
# How Can I Generalize Outcomes to Other Settings?

<table>
<thead>
<tr>
<th></th>
<th>5.4</th>
<th>□ Strategies for generalizing outcomes to other settings are described.</th>
<th>□ Strategies for generalizing outcomes to other settings are not described.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.5</td>
<td>□ Strategies for follow-up are developed.</td>
<td>□ Strategies for follow-up are not developed.</td>
</tr>
<tr>
<td>RATING</td>
<td></td>
<td>□ EFFECTIVE</td>
<td>□ NEEDS DEVELOPMENT</td>
</tr>
</tbody>
</table>
HOW CAN I GENERALIZE OUTCOMES TO OTHER SETTINGS?

- If the intervention is successful,
  - Decrease the intensity of the intervention or discontinue the intervention
  - Good idea to continue to collect progress monitoring data
    - Ensure that student continues to make progress
    - Student has generalized skill enough to perform it independently
- If student does not continue to make progress, the intervention is reintroduced to see if progress resumes
- Utilize the intervention across different classrooms, across different teachers, etc.
WHAT FOLLOW-UP STRATEGIES DO I NEED?

- Check in and check out with the teacher or other professionals
- Continued progress monitoring to ensure that the student continues to make progress
- Transition planning (e.g., plans for transitioning from primary to secondary school)