THE FOURTH STEP TO BEHAVIOR CHANGE:
CONTINUING TO GATHER AND EVALUATE DATA

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LEARNER OBJECTIVES

1. Participant will be able to determine the appropriate measurement procedure to use when monitoring progress.
2. Participant will be able to interpret data displays.
3. Participant will be able to determine if progress is being made and the goal is worth keeping.
The data gathered throughout the implementation of a behavior intervention plan is the basis for every important decision.

**COMPLETE THE FIRST THREE STEPS TO BEHAVIOR CHANGE**

- **First Step:** Selecting and defining the behavior(s)
- **Second Step:** Baseline data collected.
- **Third Step:** Evaluate baseline data and determine the eco-behavioral variables that influence the problem behavior
  - If needed, complete a functional behavioral assessment to determine possible function of the problem behavior(s).
  - The function of behavior has guided your intervention selection. Determine new skills to teach.
STEP 4: INTRODUCE INTERVENTION AND CONTINUE TO GATHER AND EVALUATE DATA

- You must continue to collect the data on the key dimensions that were collected during baseline.
- Analyze data looking for patterns, variability and trends.
- Evaluate the data to decide if you should continue with the current procedures, try a different intervention, or reinstate a prior procedure.

COMPARE APPLES TO APPLES

- Baseline data has been collected on the dimension(s) of a problem behavior (e.g., the rate of blurting out).
- You must also collect baseline data on new behavior you are going to teach (e.g., teach raising hand without calling out to a student who blurts out).
- This data will help you determine if the new behavior is increasing in frequency and is being generalized across settings and people.
- Base the behavioral goal’s achievable mastery criteria on the data collected during baseline.
SPECIFY DESIRED OUTCOME BEFORE YOU INTERVENE

- Make your goal clear and precise, state exactly how you want the behavior to change.
- Your goal will be stated positively ("John will do...." not "John will no longer......").
- It will include the dimensions to be changed ("John will raise his hand without calling out while his hand is up during 5 consecutive opportunities....").
- Set your criterion for mastery or acceptable change level.
- Specify the conditions in which the behavior must occur, such as across settings and people to ensure generalization.

EVALUATING DATA

- Making decisions from raw data is very difficult.
- Only large changes in performance can easily be detected.
- If behavioral change can be detected, it is hard to determine the degree of change.
- You will not be able to respond quickly to behavior change, instead will only respond when the change is great, which may be too late.
Can you determine if the intervention is effective?

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**EVALUATE YOUR DATA BY GRAPHING YOUR DATA**

- Visual analysis through graphing helps you make sense of quantitative information and determine effects of treatment.
- Helps you determine if you have enough data to make decisions.
- Allows for ongoing visual record of student’s behavior and quick response to the need to change interventions.
- Allows for easy identification of interesting variations or patterns in behavior.
INTERPRETING A GRAPH

Get the most out of your data, plot it each day

- The more data plotted on the graph, the more believable the change in behavior and sustainability of that change.
- Variability- how often and the extent to which data collected over time yields different results.
  - Look at the extent of variability in the data.
  - A lot of variability indicates that there may be unknown factors influencing the behavior.
- Trend- the overall direction taken by the data path.
  - Look at the direction and degree of the "trend"

HOW CONVINCED ARE YOU THAT TREATMENT WAS EFFECTIVE?
MORE DATA, MORE CONVINCING

How convinced are you that treatment was effective?
How convinced are you that treatment was effective?

EVALUATING PROGRESS TOWARD THE GOAL

- Evaluate daily the data, data path, variability and trend to determine:
  - do you have enough data to make decisions?
  - Is a pattern emerging?
  - should you change the intervention due to slow progress?
  - should you continue the intervention?
  - should you stop the intervention?
PROGRESS MONITORING

- Data do not have to be collected continuously throughout the day or even daily, but must be collected often enough so that trends can be identified.
- Can you identify trends with the current frequency? If so, you can collect data less frequently. Consider how frequently that would be (e.g., during one time of the day, every 2 days, weekly, every other week).

DATA AS REINFORCEMENT

Consider the value of collecting data as a source of reinforcement for
- the adults involved in implementation of behavior change
- the individual student
- the parent
**Visual Display of Data as an Accountability Measure**

No data? No intervention that day?
If skill is to be practiced ten times a day, are there 10 data points?
Data collection sheets serve as reminders to staff that the intervention should be implemented.
Data can be sent home each week to allow parents to participate in the process.

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**Keep the Data Keeping Process Going!**

- Have scheduled meetings every other week, or every month
- Meet for just 30 minutes
- Focus of meeting is overview of data
- Keep data organized in a binder
- Discussion of implications follows review