Why Collect Data?

As special educators, we sometimes feel we’re drowning in a sea of paperwork! Yet, here is an article stressing the importance of keeping data! While there are compelling reasons to maintain data collection procedures, this article will focus on making it as painless and useful as possible.

Great teachers have an instinct, or “sixth sense,” for determining student progress. Education and experience help them “just know” what needs to be done. Unfortunately, subjective means of documenting behaviors and skill acquisition based on observation over time are just that — subjective. “Johnny is much better!” “Susie has made so much progress!” While Johnny is and Susie has, these statements don’t tell us much. It is better to say:

Johnny’s biting has decreased from 10 incidents a day 1-month ago to two incidents per week.

Susie can demonstrate knowledge of multiplication tables through 10.

It is usually not necessary to record data all day or to keep voluminous anecdotal notes. A consistent method appropriate to the nature of the target skill or behavior will provide the data needed. Although there is a level of additional work involved, like many worthwhile efforts, the initial output is worth the work in terms of streamlining later. When called upon to justify methodology choices, you will be confident if you have data to review.

Two components of the Individuals with Disabilities Education Act (IDEA) necessitate data collection. IDEA requires that we report student progress as often as reports are made in regular education. Because so much of what we do does not lend itself to typical measurement, our data become invaluable in our reports to parents. In addition to regular reporting, we also may be called upon to participate in making a manifestation determination. Data also can help determine the relationship of a child’s disability to a critical behavioral event. It is always preferable to have well documented records before the occurrence of a critical behavior to serve as a reference in decision making.

Descriptions of Various Data Collection Strategies

There are various data collection techniques you can use depending on the information you want to collect.

- **To collect baseline data** means recording the occurrence of a particular response prior to implementation of an intervention designed to change something. This information is needed to document progress after an intervention. We don’t know how far we’ve gone unless we know where we started.

- **Event recording** is a method by which a cumulative record of discrete responses is collected. This simply involves making a mark on a piece of paper or using a golf counter, etc., to document a behavior of insignificant duration (i.e., a discrete event).

- **Duration recording** is recording the total amount of time (out of a designated period of time) a child is engaged in a particular response. This technique is helpful when recording tantrums, hyperactivity, and play.

- **Time sampling** divides each observation session into a number of equal intervals. The behavior is observed for a brief period at the end of each interval. This method is sensitive to subtle, hard-to-observe behavior such as self-stimulation. It’s also helpful when we’re involved in something else (what teacher isn’t?) and can’t give full time to observation.
Trial-by-trial data collection consists of recording the outcome of each trial presented within the discrete trial format. This is usually event recording.

Descriptive data recording anecdotally records the complete response emitted by the child. Skills learned through successive approximation are often described using descriptive data recording. This is also helpful in describing variables (antecedent and setting events) influencing a child’s performance.

The number of drawings completed or number of worksheet problems completed is the permanent product.

Whatever method is chosen to document performance, there are minimum requirements that should be considered, including the accuracy of performance, the rate of performance, nonresponses vs. incorrect responses, and the pattern of responding. Plotting students’ performances on graphs and charts gives a visual representation of progress that is quick and easy to interpret. It can also give ongoing perspective, which can help direct us when planning implementation strategies.

References