# Please put the following information in the Chat Box:

- What is your name?
- What is your role?
- Which site do you work with?
- Do you have any questions or concerns you want us to consider throughout this training?

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# Please note –

**When you enter the meeting,**

**your mics will automatically be muted.**

**Please leave them muted to cut back on distracting background noise.**

**However, please feel free to unmute yourself and ask questions as they come up**

***or***

**drop any questions in the Chat Box.**

# Thank You!

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# Office of Special Services

## CDS

## Data Collection:
## Frequency, Rate and Event Recording – Extended
*and*
## Duration

**Zoom Meeting Date:**

Tuesday 7/22/2020

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# Team Members

**Roberta Lucas – Federal Programs Coordinator**

roberta.lucas@maine.gov

**Leora Byras – Special Education Consultant:** Worked as Special Educator in an SPPS for 25+ years. Taught all grades over the course of that time in a self-contained classroom. Has been with the MDOE since September 2018.

leora.byras@maine.gov

**Anne-Marie Adamson – Special Education Consultant:** Special educator public K-12 resource room and SPED coordinator for 12 years. Facilitated CDS transition meetings during that time. Taught Pre-K and K in private sector for 10 years. At the MDOE since March 2020.

anne-marie.adamson@maine.gov

**Colette Sullivan – Special Education Consultant:** Worked as a Special Education teacher for 30 years, primarily with students with Autism. Also worked at CDS York for 3 years, in a variety of roles, and have been with MDOE since August 2018.

colette.sullivan@maine.gov

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| | | |
|---|---|---|
| **Data: Frequency, Rate, Event**<br>**Tuesday 7/21/2020** | **Data: Frequency, Rate, Event – Extended *and* Duration**<br>**Wednesday 7/22/2020** | **Data: Duration – Extended**<br>**Thursday 7/23/2020** |
| **Data: Latency**<br>Tuesday 7/28/2020 | **Data: Latency – Extended**<br>Wednesday 7/29/2020 | **Data: Latency – Exemplars and Practice**<br>Thursday 7/30/2020 |
| **Data: Interval**<br>Tuesday 8/4/2020 | **Data: Interval – Extended**<br>Wednesday 8/5/2020 | **Data: Intervals – Exemplars and Practice**<br>Thursday 8/6/2020 |
| **Data: IEP Training**<br>Tuesday 8/11/2020 | **Data: IEP Training**<br>Wednesday 8/12/2020 | **Data: IEP Training**<br>Thursday 8/13/2020 |
| **Autism and Developmental Delay –**<br>Tuesday 8/18/2020 | **Autism and Developmental Delay – Considerations and Practice**<br>Wednesday 8/119/2020 | **Autism and Developmental Delay – Present Level and Goals**<br>Thursday 8/20/2020 |

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**This 7 Week training session was requested by Erin Frazier, State Director of Special Services B-20, in an attempt to align all Part B Programming.**

All material has been prepped, but will be modified and adapted based on your feedback.

This is intended to be Foundational Learning and each session will be built upon the session prior.

Please consider a student you work with that has Autism or DD.

Be prepared to share the child's initials and DOB on Week 5.

We will review in CINC and choose 2 as Case Studies. We will discuss programming specific to those children.

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Caregiver Input

Evaluations/ Observations

**CHILD**

Centered IEP

LRE

Data

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# Utilize Data to Make Decisions About Program Effectiveness

- Data highlights **increases** or **decreases** in performance.
- Data helps determine trends.
- Look for trends of 3 or more data points in the same direction.
- Data should be a continuous, ongoing process.

http://iseesam.com/content/teachall/text/behavior/LRBIpdfs/Data.pdf

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# Stages of the Teaching Spiral

**Assessing to promote children's learning and development**

| Birth 1 Year 2 Year | 3 Years 4 Years | 5 Years 6 Years 7 Years 8 Years |
|---|---|---|
| Parents and caregivers observe and respond as children develop language and physical skills. | Parents, caregivers, and preschool teachers use direct measures, including observations of what children are learning, to decide what to teach next. | Teachers use both formal and informal assessments to plan and giude instruction. |

*From: Principles and Recommendations for Early Childhood Assessments; National Educational Goals Panel; February 1998*

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https://www.rrcc.edu/early-childhood-education/observe2

# Stages of the Teaching Spiral

1. Observe and Collect Data
2. Analyze the Collected Information
3. Reflect on the Data
4. Communicate with Others
5. Take Action

https://www.rrcc.edu/early-childhood-education/observe2

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# Stages of the Teaching Spiral

https://www.rrcc.edu/early-childhood-education/observe2

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| | |
|---|---|
| **When to Use** | • When there is time to observe the student continuously.<br>• Want to assess how many times a student engages in behavior |
| **How to Use** | 1. Define behavior and observe<br>2. When behavior occurs, make a tally mark<br>3. Add up all tally marks at the end of the observation<br>4. (optional) Divide by total observation time to get rate |
| **Examples** | • Number of times student makes noises<br>• Rate per minute of student's correct answers<br>• Number of times student uses the restroom (if of equal length of time) |
| **Advantages** | • Most direct measure – involves tallies of each instance of behavior<br>• Conversion to a rate per minute standardizes for comparison |
| **Disadvantages** | • Requires continuous direct attention<br>• Behaviors must all last about the same length of time<br>• Not all behaviors can be counted (some happen too fast) |
| **Materials** | • Some manner of recording frequency |
| **Considerations** | • If behavior requires a signal or prompt then Frequency recording is inappropriate<br>• Rate is calculated by dividing the total number of behaviors recorded ty the total amount of time observed (e.g., 10 behaviors in 5 minutes = rate of 2 per minute). |
| **Data Label** | • Number of behaviors (frequency) or rate of behavior per minute (rate). |

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https://youtu.be/8Vv8zpT96SM

# REVIEW:
# Frequency, Rate and Event Recording

## Description:

- These methods involve counting the number of times a behavior occurs in a specific time period.
- Use these methods if the behavior can be easily counted and the behavior has a clear beginning and end.
- Do not use these methods if the behavior is occurring at such a high rate that an accurate count is impossible (e.g., pencil tapping)
- Do not use these methods if the behavior occurs for extended periods of time (e.g., 2 tantrums, but the duration of each tantrum is one hour).

https://achieve.lausd.net/

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# REVIEW:
# Frequency, Rate and Event Recording

**Frequency or Rate Recording – defined as the number of responses per unit of time**

**Event Recording – encompasses a wide variety of procedures for detecting and recording the number of times a behavior of interest occurs**

**Cooper, John O., Timothy E. Heron, William L. Heward. *Applied Behavior Analysis 2nd Edition,* Columbus: Pearson, 2007.**

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# Frequency Data Tracking Program

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https://www.pbisworld.com/data-tracking/

# Frequency Data Tracking Program

PBIS World ©PBISWorld.com

Behavior/Intervention Tracker

Student Name: Susie Smart Month/Yr:

D.O.B. School:

Teacher: Grade:

| Data / Date | 1/1/2020 | 1/2/2020 | 1/3/2020 | 1/4/2020 | 1/5/2020 | 1/6/2020 | 1/7/2020 | 1/8/2020 | 1/9/2011 | 1/10/2011 | 1/11/2011 | 1/12/2011 | 1/13/2011 | 1/14/2011 | 1/15/2011 | 1/16/2011 | 1/17/2011 | 1/18/2011 | 1/19/2011 | 1/20/2011 | 1/21/2011 | 1/22/2011 | 1/23/2011 | 1/24/2011 | 1/25/2011 | Monthly Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Screaming | 1 | 5 | 5 | 7 | 8 | 9 | 3 | 4 | 7 | 1 | 9 | 3 | 9 | 9 | 4 | 6 | 7 | 6 | 5 | 4 | 4 | 4 | 4 | 7 | 4 | 135 |
| Hitting | 1 | 3 | 5 | 3 | 5 | 4 | 3 | 4 | 3 | 2 | 3 | 4 | 2 | 5 | 3 | 5 | 1 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 1 | 78 |
| Crying | 1 | 5 | 5 | 7 | 8 | 9 | 3 | 5 | 7 | 1 | 9 | 3 | 9 | 6 | 4 | 4 | 7 | 9 | 5 | 4 | 4 | 5 | 5 | 7 | 1 | 133 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| Break Card | 1 | 0 | 0 | 1 | 0 | 2 | 1 | 3 | 1 | 1 | 2 | 0 | 3 | 3 | 4 | 2 | 4 | 4 | 5 | 5 | 5 | 7 | 6 | 6 | 7 | 73 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |

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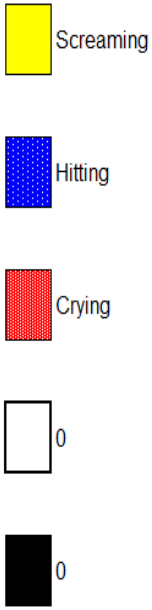
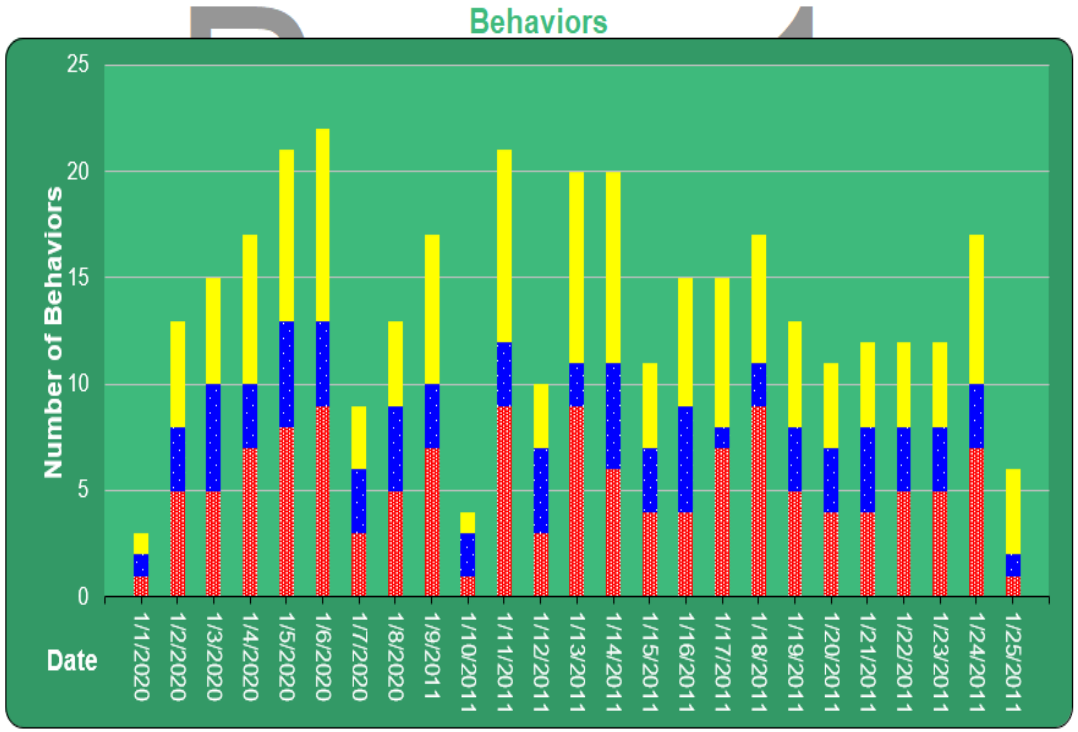
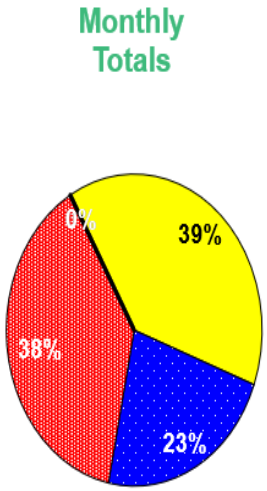
https://www.pbisworld.com/data-tracking/

# Frequency Data Tracking Program

## Graphs

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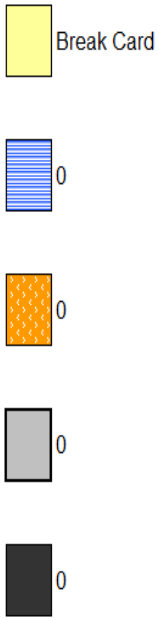
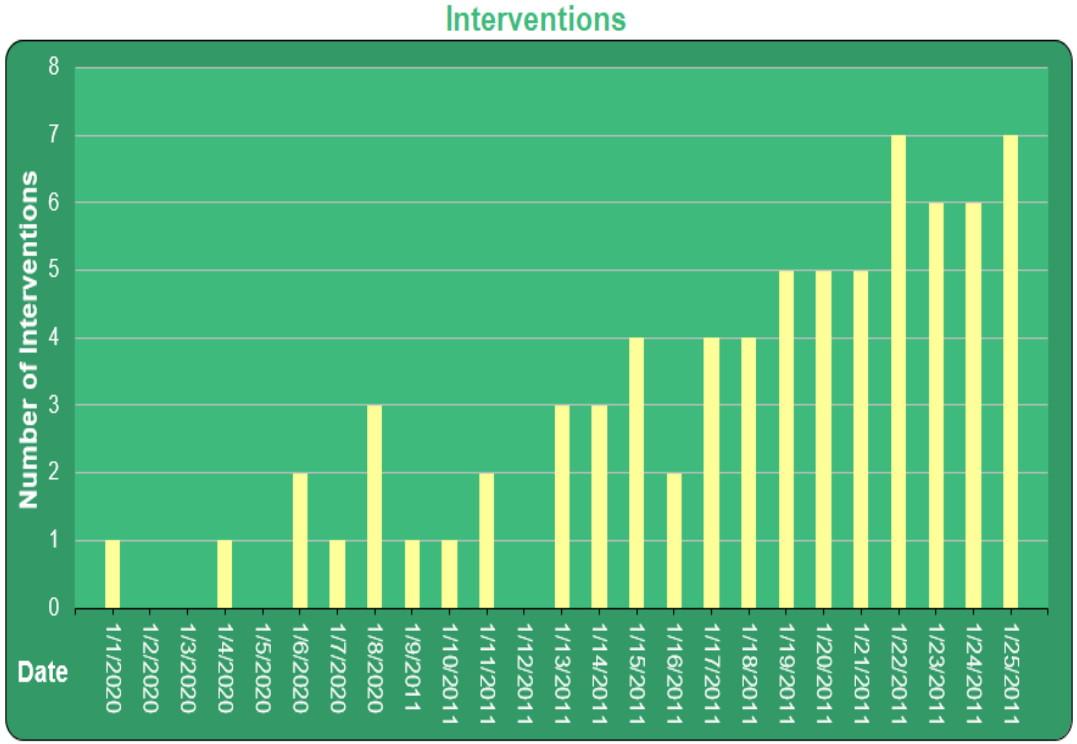
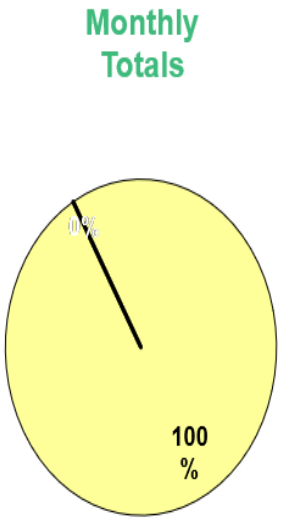
https://www.pbisworld.com/data-tracking/

# Frequency Data Tracking Program




https://www.pbisworld.com/data-tracking/

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# *Thoughts and Questions*

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# Duration Recording

**Duration Recording – defined as the total extent of time in which a behavior occurs**

**You can measure one or both of 2 Kinds of Duration Measures ➡**

- Total Duration per Session – measure of the cumulative amount of time in which a person engages in the target behavior
- Duration per Occurrence – measure of the duration of time that each instance of the target behavior occurs

**Cooper, John O., Timothy E. Heron, William L. Heward. *Applied Behavior Analysis 2nd Edition,* Columbus: Pearson, 2007.**

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# Duration Recording

**Best Used When:**

- You want to measure how long a behavior lasts.
- The behavior has a clear beginning and ending.
- You have consistent access to some timing instrument, like a clock, stop watch or similar.
- The behavior does not happen often, but when it does, it lasts a long time.
- You want to measure the duration of target behaviors that are either too long or too short of a time period.

http://www.specialconnections.ku.edu/~specconn/page/assessment/ddm/pdfEvent_recordingexamplerevised.pdf

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# Advantages to Duration Recording

- An advantage of this measurement is that you sometimes can see gradual improvements in duration before you see changes in frequency of the behavior.
- This measurement gives you both forms of data.
- It can be most beneficial when you are measuring a behavior that includes behaviors that are too frequent or harder to measure (pencil tapping, talking to peers).

This Photo by Unknown Author is licensed under CC BY-SA-NC



http://www.sped.sbcsc.k12.in.us/ppm/behavior/datacollection.html

# Duration Recording

**Examples**:

- Crying
- Attention to Task
- Reading a Book
- Writing in Class
- Out of Seat Behavior
- Time On Task
- Screaming/Yelling
- Rocking

http://www.specialconnections.ku.edu/~specconn/page/assessment/ddm/pdf/Behavior_Duration_example_revised.pdf

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# Duration Recording

## Procedures –

**Every time you are observing the behavior:**

- Make sure that you have a timing instrument available prior to beginning the observation
- Each time that the behavior occurs, document:
  - Date
  - Time Behavior Began
  - Time Behavior Stopped
  - Calculate the length of time that the behavior lasted

http://www.specialconnections.ku.edu/~specconn/page/assessment/ddm/pdf/Behavior_Duration_example_revised.pdf

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# Duration Recording

**Total Duration per Session** – measure of the cumulative amount of time in which a person engages in the target behavior

Example:

- Teacher is concerned that a K student spends too much time playing alone
- During Free Play, teacher will start stopwatch anytime child engages in solitary play.
- If child engages with peers, teacher stops timer, but does not reset it.
- If child drifts into solitary play again, teacher starts stopwatch again.
- At the end of the 30 minute play activity, teacher will have total duration of solitary play.

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**Cooper, John O., Timothy E. Heron, William L. Heward. *Applied Behavior Analysis 2nd Edition,* Columbus: Pearson, 2007.**

# Duration Recording

**Total Duration per Session – measure of the cumulative amount of time in which a person engages in the target behavior**

| **Behavior: Solitary Play** – Any instance in which XXX engages in solitary activity, and is not engaging with peers. Can include parallel play. | | |
|---|---|---|
| **Date** | **Activity** | **Total Duration Per Activity** |
| 5/6/2020 | Free Play – 30 Minutes | 12 minutes |
| 5/7/2020 | Free Play – 30 Minutes | 7 minutes |
| 5/8/2020 | Free Play – 30 Minutes | 8 minutes |
| 5/10/2020 | Free Play – 30 Minutes | 15 minutes |
| 5/11/2020 | Free Play – 30 Minutes | 16 minutes |
| 5/12/2020 | Free Play – 30 Minutes | 4 minutes |

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# Duration Recording

**Duration per Occurrence** – measure of the duration of time that each instance of the target behavior occurs

Example:

- Each time a student leaves their seat, teacher starts a stopwatch.
- Teacher stops it when child returns to seat.
- Total time is recorded and the timer is reset.
- Process is repeated as needed throughout observation period.
- Resulting measures yield data on duration of occurrences of each out of seat behavior over the observation period.



**Cooper, John O., Timothy E. Heron, William L. Heward. *Applied Behavior Analysis 2nd Edition,* Columbus: Pearson, 2007.**

# Duration Recording

**Duration per Occurrence – measure of the duration of time that each instance of the target behavior occurs**

**Behavior: Leaving Seat** – Any instance in which XXX is at least one foot away from his desk/seat anytime after the lesson has started. Includes times when he has asked, but was not given permission to leave desk/seat area.

| Date | Observation Period | Total Duration Per Occurrence |
|---|---|---|
| 5/6/2020 | Math 12:00-12:45 | 14 minutes |
| 5/7/2020 | Math 12:00-12:45 | 9 minutes |
| 5/8/2020 | Writing 9:15-9:45 | 3 minutes |
| 5/10/2020 | Science 1:00-1:40 | 1 minute |
| 5/11/2020 | Math 12:00-12:45 | 7 minutes |
| 5/12/2020 | Circle Time | 0 minutes |

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# Duration Recording

**Duration Data Sheet**

Length of time from beginning to end of response. Behaviors often measured with this method include tantrums, crying, screaming, etc.

**Description of Target Behavior:**_____

| | | | | |
|---|---|---|---|---|
| Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ |
| Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ |
| Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ |
| Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ | Date: _____<br>Start time: _____<br>End time: _____ |
| Total Minutes Duration | | | | |
| Total Minutes Observed | | | | |
| PERCENT | | | | |

https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.swsc.org%2Fcms%2Flib04%2FMN01000693%2FCentricity%2FDomain%2F130%2F4.Duration%2520Data%2520Sheet.doc

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# Duration Recording

**Behavior**: Working individually
**Behavior Definition**: Sitting at desk, with an assignment on the desk, looking at assignment, not talking to peers. Once student looks up (not looking at assignment any more), the behavior has stopped. If student begins talking to peers while looking at assignment, behavior has stopped.

| Date | Enter time when the behavior began | Enter time when behavior stopped | Length of time that the behavior lasted for |
|---|---|---|---|
| 11/5 | 9:55 AM | 10:06 AM | 11 minutes |
| 11/5 | 10:19 AM | 10:28 AM | 9 minutes |
| 11/6 | 9:43 AM | 9:51 AM | 8 minutes |
| 11/7 | 10:04 AM | 10:19 AM | 15 minutes |
| 11/7 | 10:23 AM | 10:33 AM | 10 minutes |

http://www.specialconnections.ku.edu/~specconn/page/assessment/ddm/pdf/Behavior_Duration_example_revised.pdf

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# Duration Recording

Duration Recording Form

Student's Name: _____ Teacher: _____

Subject/Period: _____ Date(s): _____

Behavior Definition (in specific, observable, measurable terms):

_____

_____

| Date | Enter time when the behavior began | Enter time when behavior stopped | Length of time that the behavior lasted |
|---|---|---|---|
| | | | |
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Tieghi-Benet, M. C., Miller, K., Reiners, J., Robinett, B. E. Freeman, R. L., Smith, C. L., Baer, D., Palmer, A. (2003). *Encouraging Student Progress (ESP), Student/ team book.* Lawrence, KS: University of Kansas.

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# Duration Recording

**Behavior**: **Crying** – Any instance in which XXX engages in a vocalization louder than is used for communication, lasting 3+ seconds, which may or may not include tears.
(Non-Example: laughing/giggling, crying as a result of hurting himself)

| Date | Time Behavior Began | Time Behavior Ended | Length of Time Behavior Lasted | Activity |
|---|---|---|---|---|
| 5/6/2020 | 9:07 | 9:12 | 5 mins | Circle Time |
| 5/8/2020 | 9:14 | 9:21 | 7 mins | Circle Time |
| 5/10/2020 | 9:10 | 9:19 | 9 mins | Circle Time |
| 5/11/2020 | 11:31 | 11:33 | 2 mins | Bathroom |
| 5/12/2020 | 9:06 | 9:14 | 8 mins | Circle Time |

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# **Thoughts?**

Based on the **Duration Data**,

make a guess as to why the child *might* be **Crying**.

How can this relate back to teaching a **Replacement Behavior?**

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# Avoid Writing Outcome Goals

**Data Collection** can continue to be useful when considering teaching **skills** that will facilitate a change in any outcome based goal.

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# Remember –

- ✓ In this example, we are tracking crying.
- ✓ Our intention is taking data on this behavior is to identify why it is happening.
- ✓ The why speaks to the **distinctly measurable and persistent** gap.
- ✓ The replacement behavior will be taught so that crying is reduced.
- ✓ Crying is outcome based.
- ✓ Therefore, teach to the skill deficit

  (Ex. self regulation, self monitoring, break, help, all done, or similar)

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# Duration Recording

**Summarizing the Data –**

- Use a clock, watch or similar.
- Start the timer when behavior occurs.
- Stop the timer when behavior ends.
- Compute the length of the occurrence.
  - Average across multiple settings ***OR***
  - Percentage of observation time that the behavior was displayed

http://www.behavioradvisor.com/BehRecord.html

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# Example of Duration Measurement

**Example Behavior:** Playing individually

**Behavior Definition:** In creative play area; playing individually or in cooperative play with peers

- Once student calls or seeks out an adult, the behavior has stopped.
- If student begins calling for an adult while playing with peers, the behavior has stopped.

# Example of Duration Measurement

## Charting Playing Individually

| Date | Time when student started playing individually | Time when student stopped playing individually | Length of time that student playing individually |
|---|---|---|---|
| **5/6** | 9:55 am | 10:06 am | 11 minutes |
| **5/6** | 10:19 am | 10:28 am | 9 minutes |
| **5/7** | 9:43 am | 9:51 am | 8 minutes |
| **5/8** | 10:04 am | 10:19 am | 15 minutes |
| **5/8** | 10:23 am | 10:33 am | 10 minutes |

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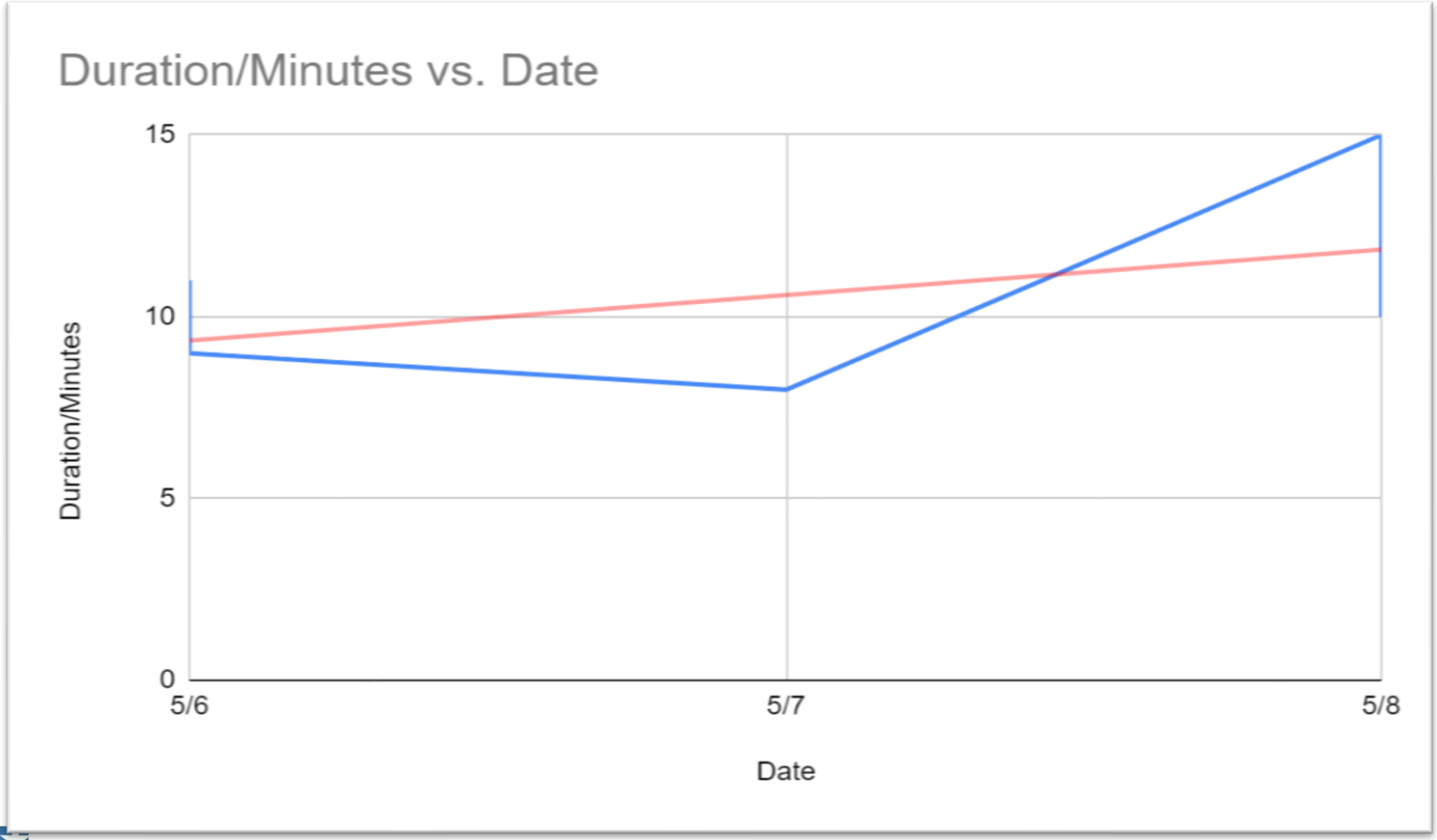
# Duration Data Graphed

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# Duration Recording

## Special Considerations –

- Intensity – the force with which a behavior occurs
- Always consider the INTENSITY of the behavior in conjunction with the duration.
- Adjust accordingly

**Pay Close Attention**

**to extreme or intense behaviors**

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**Consider**

**<u>Duration Recording</u>**

**as one form of Data Collection.**

**What goals, either <u>Academic</u> or <u>Functional</u>, might you track with this system?**

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- National Association for the Education of Young Children (NAEYC) - Family Resources Page This website provides resources, tips, and ideas around child development and early learning domains.
- Zero to Three - At-Home Activity Guide This list of activities helps support development through play for infants and toddlers. The activities suggested for the toddlers can easily apply or be adapted for preschoolers.
- Coping with COVID-19 Online resources to provide information from NAEYC, the CDC, and other educational organizations. There are multiple resources to support children's learning during this time.
- Screen Time and Preschoolers The Academy of Pediatrics recommendations for screen time of high-quality programming for children ages 2 to 5.
- High Scope COR - Resource and Tools for Parents and Teachers An extensive database of family activities for both Infant-Toddler and Preschool children.
- ReadyRosie - Healthy at Home: A Toolkit for Supporting Families Impacted by COVID-19 A free toolkit as a resource to support families with information and resources for supporting the children in their care.
- The National Center for Pyramid Model Innovations (NCPMI) - Teaching Social Emotional Skills Activities, materials and tools to help children promote self-regulation or problem solving.
- Colorado Early Learning and Development Guidelines Resources that are research-based suggestions for how adults can support children's development.
- National P3 Center - At-Home Teaching and Learning in PreK-3rd Grade Guidance related to school districts' and elementary schools' supports for at-home learning across the primary grades (PreK-3rd grade).

**http://www.cde.state.co.us/learningathome/remotelearningresources#ece**

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# ***Please let us know...***

# What questions do you have?

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# Team Members

**Roberta Lucas – Federal Programs Coordinator**

roberta.lucas@maine.gov

**Leora Byras – Special Education Consultant:** Worked as Special Educator in an SPPS for 25+ years. Taught all grades over the course of that time in a self-contained classroom. Has been with the MDOE since September 2018.

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colette.sullivan@maine.gov

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# Who's Who at MDOE

- **Pender Makin** – Maine State Commissioner of Education
- **Erin Frazier** – State Director of Special Services B-20
- **Roberta Lucas** – Federal Programs Coordinator
- **Mary Adley** – Coordinator of State Agency Programs and Special Projects
- **Roy Fowler** – State Director Child Development Services
- **Barbara McGowen** – Finance Coordinator
- **Shawn Collier** – Data and Research Coordinator
- **David Emberley** – Due Process Consultant
- **Tracy Whitlock** – Special Education Consultant/Special Projects
- **Colette Sullivan** – Special Education Consultant
- **Leora Byras** – Special Education Consultant
- **Anne-Marie Adamson** – Special Education Consultant
- **Colene O'Neill** – Secretary Specialist
- **Julie Pelletier** – Secretary Associate

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