In the **Chat Box**,

please note:

Name, Role, Site You Work With

Hello!

Maine Department of Education

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: Interval

Zoom Meeting Date:

Tuesday 8/4/2020

Maine Department of Education

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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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.

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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.

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Child First

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Per our conversation 7/28/2020 –

- Email us CINC numbers.
- We have received several and will review.
- We will review and offer feedback on goals in follow up presentations.

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We have received **Feedback** from several participants.

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Data: Interval **Tuesday 8/4/2020**	**Data: Interval – Extended** **Wednesday 8/5/2020**	**Data: Intervals – Exemplars and Practice** **Thursday 8/6/2020**
Data: IEP Training Tuesday 8/11/2020	**Data: IEP Training** Wednesday 8/12/2020	**Data: IEP Training** Thursday 8/13/2020
Autism and Developmental Delay – Tuesday 8/18/2020	**Autism and Developmental Delay – Considerations and Practice** Wednesday 8/119/2020	**Autism and Developmental Delay – Present Level and Goals** Thursday 8/20/2020

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ABC – Antecedent/Behavior/Consequence

Example: Peer took toy from child, child hit peer, peer returned toy

Frequency – This is how many times that a behavior occurred.

Example: Child screamed 7 times during an hour observation

Rate – Ratio of count per observation time.

Example: Child engages in an average of 16 instances of screaming per hour.

Duration – A measure of the total time that the behavior occurs.

Example: One instance of screaming lasted for 37 seconds

Latency – A measure of the elapsed time from the onset of a stimulus to the initiation of a response.

Example: Child responded to the task to write name after 16 seconds.

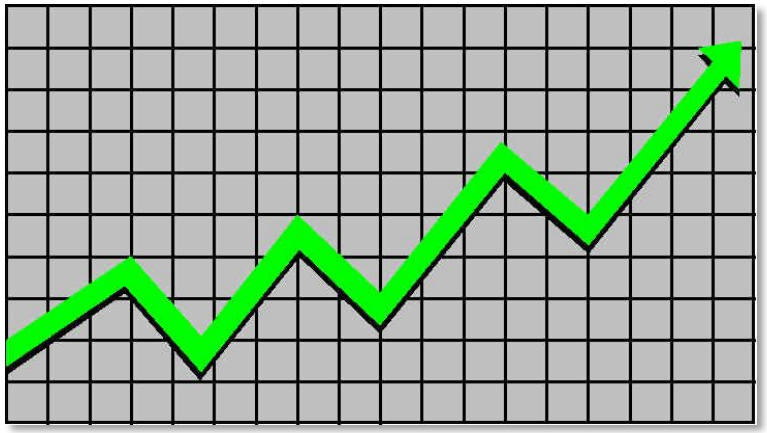
Use of Data

Data should be used to:

- ✓ assist in program effectiveness
- ✓ determine the need for change

Remember to:

1. Take the Data
2. Evaluate and Analyze the Data
3. Use the Data



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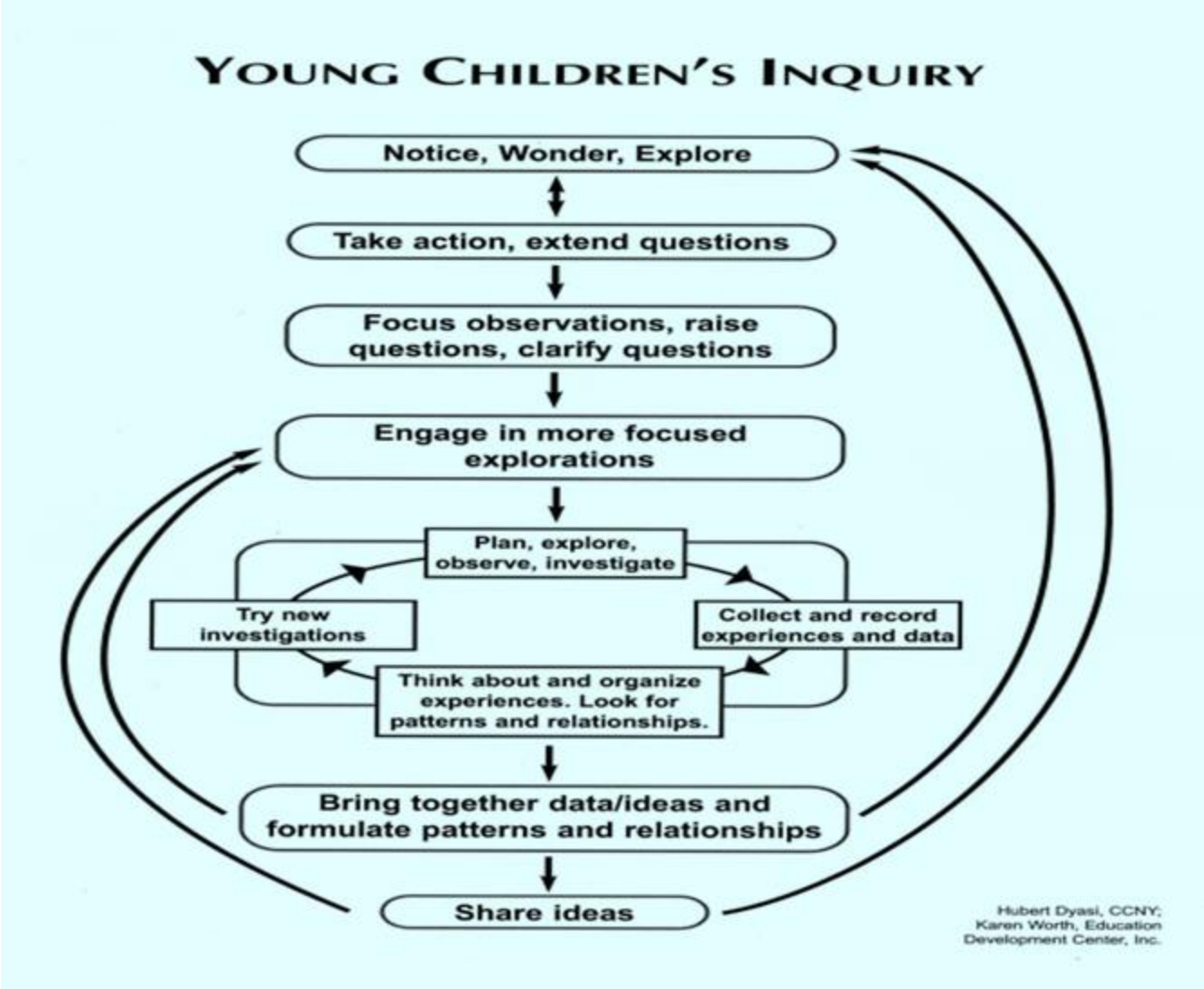

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http://www.doe.mass.edu/covid19/learn-at-home.html

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Interval Recording

Partial Interval Recording – a time sampling method for measuring behavior in which the observation is divided into a series of brief time intervals. The observer records whether the target behavior occurred at any time during the interval. Tends to overestimate the proportion of the observation period.

Whole Interval Recording – a time sampling method for measuring behavior in which the observation period is divided into a series of brief time intervals. At the end of each interval, the observer records whether the target behavior occurred throughout the entire interval. Tends to underestimate the proportion of the observation period.

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

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Interval Recording

Best Used When:

- The behavior is continuous or has an onset and end that are difficult to distinguish.
- Behaviors are not happening at such a high rate that it is hard to document.

Do Not Use When:

- The behavior is difficult for you to time because it requires an observer's undivided attention.
- Teachers interested in this measurement strategy may need to ask someone else to observe and collect whole interval data for them while they are working with students or engaged in instruction.

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http://www.specialconnections.ku.edu/?q=assessment/data_based_decision_making/teacher_tools/partial_interval_recording

Interval Recording

Examples:

- leaving one's seat
- raising one's hand
- yelling out an answer
- asking to go to the bathroom
- being late or being on time to class

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

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Types of Interval Recording

- In **Whole Interval** time sampling, you observe the student for a few seconds at designated intervals and notice whether the behavior occurs for the whole interval that you are looking for it (mark "yes" or "no" as to whether this behavior occurred for the whole time that you were watching).
- Example Behavior Definition: Being on-task including looking at the teacher while she is talking; talking to the teacher; or looking at assignment Total Observation Time: 10 minutes Length of each interval: 1 minute
- During each time interval:
  - Look to see if the behavior occurs throughout the entire interval
  - If the behavior stops at any time, place an “O” for that interval
  - If, at the end of the interval the behavior is still occurring, place an x “X” for that interval

* At the end of your observation time, total the number of “X”s (This is what you graph)

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

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

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Whole Interval Recording

Behavior: Reading

Behavior Definition: Reading printed or digital material either silently or out loud. Reading can be done alone or in groups.

Total Observation Session: 120 minutes (2 hrs) **Interval Length:** 15 minutes

Date: *7-15*	Interval Number								Total No. Intervals Behavior Observed
Time: *3:30 – 5:30 PM*	1	2	3	4	5	6	7	8	
Y or N									

https://image.slidesharecdn.com/zaleskiparaprodatacollection-160414135848/95/introduction-to-data-collection-8-638.jpg?cb=1460642369

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Whole Interval Recording

Whole Interval: The behavior must occur for the *entire* interval to be recorded as [+]
Underestimates rates of behavior **Partial Interval:** *part* of the interval to be recorded as [+]
Overestimates behavior

Calling out	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**+/total**
Record a [+] for occurrence or [-] for Non-occurrence							

Calling out	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**+/total**
Record a [+] for occurrence or [-] for Non-occurrence							

Calling out	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**+/total**
Record a [+] for occurrence or [-] for Non-occurrence							

Calling out	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**:10 sec**	**+/total**
Record a [+] for occurrence or [-] for Non-occurrence							

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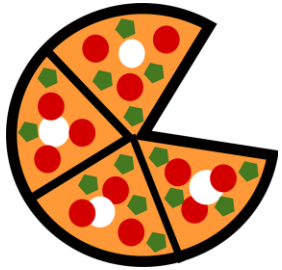
Types of Interval Recording



- In **Partial Interval** recording, you mark whether the behavior occurred at least once during the short observation interval.
- Partial interval recording can be used to measure behaviors that happen so quickly that it is hard to catch (the behavior itself does not last for a long time).
- During each time interval:
  - Look to see if the behavior occurs
  - Once the behavior occurs, put an “X” in that interval
  - If, at the end of the interval the behavior did not occur, place an “O” in that interval

* At the end of your observation time, total the number of checkmarks and create a percentage (This is what you graph)

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

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

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Partial Interval Recording

Partial Interval Recording Form

Student's Name: _____ Teacher: _____

Subject/Period: _____ Date(s): _____

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

_____

_____

Total Observation Time: _____ Length of each interval: _____

Date	Interval #										Total times behavior occurred (X)
	1	2	3	4	5	6	7	8	9	10	
O or X											

Date	Interval #										Total times behavior occurred (X)
	1	2	3	4	5	6	7	8	9	10	
O or X											

Date	Interval #										Total times behavior occurred (X)
	1	2	3	4	5	6	7	8	9	10	
O or X											

Date	Interval #										Total times behavior occurred (X)
	1	2	3	4	5	6	7	8	9	10	
O or X											

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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https://image.slidesharecdn.com/zaleskiparaprodatacollection-160414135848/95/introduction-to-data-collection-8-638.jpg?cb=1460642369

Partial Interval Recording

Partial Interval Data		
Time	**Behavior #1** – 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.	**Behavior #2** – 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)
8:00-8:15	YES NO	YES NO
8:15-8:30	YES NO	YES NO
8:30-8:45	YES NO	YES NO
8:45-9:00	YES NO	YES NO
9:00-9:15	YES NO	YES NO
9:15-9:30	YES NO	YES NO
TOTAL	3/6	2/6
%age	50%	33%

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Partial Interval Video

https://www.youtube.com/watch?v=v9EEbNsR19o

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Why Interval Recording?

- **Interval recording** is a shortcut procedure for estimating the duration of a behavior.
- In this method, the teacher periodically looks at the student at **predetermined** (NOT spontaneously selected) intervals and records whether the behavior is occurring.
- Easier to collect data because teacher can take a quick “snapshot” of the target behavior.

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

Why Interval Recording?

- In these different types, the teacher then figures the *percent of observations* that the behavior occurred.
- Interval recording is used for the same behaviors as duration recording, but this procedure takes less time and effort, and does not require that the student be observed continually.

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

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Keep in Mind

- Interval recording provides an estimation of behavior.
- Whole-interval recording typically underestimates the overall duration of the behavior because if a behavior occurs-but not for the entire interval - it is not recorded or documented as occurring.
- Partial-interval recording typically overestimates the overall duration and underestimates the rate of the behavior because if a behavior occurs multiple times during an interval, it is still documented as occurring only once.

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https://achieve.lausd.net/cms/lib08/CA01000043/Centricity/domain/361/positive%20behavior/Data/Data%20Collection%20Methods.pdf

Interval Recording

Summarizing the Data –

When using interval recording, the level of the behavior is reported as the percentage of intervals in which the behavior occurred.

To calculate the % of intervals:

- count the number of intervals in which the behavior was recorded
- divide the total number of intervals during the observation period and multiply by 100.

Example: Mary was out of her seat during 4 out of 10 intervals. 4/10=.40 times 100= Mary was out of her seat during 40% of intervals recorded during the observation.

https://achieve.lausd.net/cms/lib08/CA01000043/Centricity/domain/361/positive%20behavior/Data/Data%20Collection%20Methods.pdf

Interval Recording

Special Considerations –

- Interval Recording often takes less time and effort, because the observer only records the behavior only once during the interval, regardless of how many times the behavior occurs.
- If the intervals are too long, the results can overestimate the frequency.

https://achieve.lausd.net/cms/lib08/CA01000043/Centricity/domain/361/positive%20behavior/Data/Data%20Collection%20Methods.pdf

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Thoughts and Questions

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For an upcoming activity, please consider

<u>Outcomes</u>

versus

<u>Skill Deficits</u>.

What <u>Skill Deficits</u> might exist for a student who exhibits

<u>Off Task Behavior</u>?

And, what <u>Replacement Behavior</u>

might you teach?

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- Avoid referencing Outcomes as Goals.
- Focus on Skill Deficits.
  - What skills are interfering with the child's ability to reach those outcomes we expect for all children?
  - What skills are you teaching?

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Functional/Developmental Performance

FUNCTIONAL/DEVELOPMENTAL PERFORMANCE refers to how the child is managing daily activities in *cognitive*, *communicative*, *motor*, *adaptive*, *social/emotional* and *sensory areas*. **Developmental performance (ages 3-5)** refers to how the child is performing developmentally (comparable to same age/grade peers) in physical, cognitive, communicative, social, emotional, and/or adaptive areas.

Present Levels of Functional/Developmental Performance (MUSER IX.3.A.(1)(a)(i) & (ii):

Currently XXXXX exhibits biting behaviors in 52% of intervals observed.

Measurable Goal (MUSER IX.3.A.(1)(b) & (c)

Progress:

By date, given service, child's name will skill as measured by evidence.

By May 14, 2021, given specially designed instruction, XXXXX will decrease episodes of biting to 20% of intervals observed, as measured by data collection and teacher observation.

Objective(s) required? ☐ Yes ☒ No

By date, given service, child's name will skill as measured by evidence.

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Avoid Writing Outcomes

Use your **Data Collection** to help you identify **skills** that will facilitate a change in any outcome.

THEN write your goal around the replacement behavior you are teaching **NOT** the outcome based behavior.

FUNCTIONAL/DEVELOPMENTAL PERFORMANCE refers to how the child is managing daily activities in *cognitive*, *communicative*, *motor*, *adaptive*, *social/emotional* and *sensory* areas. **Developmental performance (ages 3-5)** refers to how the child is performing developmentally (comparable to same age/grade peers) in physical, cognitive, communicative, social, emotional, and/or adaptive areas.

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Progress:

By date, given service, child's name will skill as measured by evidence.
By May 14, 2021, given specially designed instruction, XXXXX will decrease episodes of biting to 20% of intervals observed, as measured by data collection and teacher observation.

Objective(s) required? ☐ Yes ☒ No

By date, given service, child's name will skill as measured by evidence.

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<u>Remember</u>:

On an IEP,

<u>Data</u> is *necessary* to reflect

<u>Present Level</u>.

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IDEA Requirement – MUST fill

A. Definitions

(1) In general. The term "individualized education program" or "IEP" means a written statement for each child with a disability that is developed, reviewed, and revised in accordance with this section and that includes:

(a) A statement of the child's present levels of academic achievement and functional performance, including:

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- ✓ Remember, biting is Outcome Based.
- ✓ We tracked biting data to figure out WHY.
- ✓ The WHY speaks to the **distinctly measurable and persistent** gap.
- ✓ The replacement behavior will be taught so that biting is reduced.
- ✓ Teaching Communication will decrease biting.
- ✓ Write your goal around the replacement behavior you are teaching NOT the outcome based behavior – Biting.

FUNCTIONAL/DEVELOPMENTAL PERFORMANCE refers to how the child is managing daily activities in *cognitive*, *communicative*, *motor*, *adaptive*, *social/emotional* and *sensory areas*. **Developmental performance (ages 3-5)** refers to how the child is performing developmentally (comparable to same age/grade peers) in physical, cognitive, communicative, social, emotional, and/or adaptive areas.

Present Levels of Functional/Developmental Performance (MUSER IX.3.A.(1)(a)(i) & (ii):

Currently XXXXX will exchange a visual card with a communicative partner to request a reinforcer, with hand over hand assistance, for 80% of intervals observed.

Measurable Goal (MUSER IX.3.A.(1)(b) & (c) **Progress:**

By date, given service, child's name will skill as measured by evidence.

By May 14, 2021, given specially designed instruction and a variety of prepared visual reinforcer icons/cards, XXXXX will independently exchange the visual icon/card with a communicative partner to request a reinforcer with 90% of intervals observed, as measured by data collection and teacher observation.

Objective(s) required? ☐ Yes ☒ No

By date, given service, child's name will skill as measured by evidence.

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Do Not Write Outcomes

Focus on **Distinctly Measurable and Persistent Gaps**.

- Instead of: “XXXXX will reduce instances of biting”
- Consider the skill deficits that result in biting
- Write goal around the skills that you are teaching that will reduce the biting.
- “XXXXX will request a break…”

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Behaviors that Could Use Interval Observation

In a classroom, Alex will reduce the incidence of off-task behaviors (tongue clicking, hand flapping, and rocking) to 20% of observed intervals in three out of four consecutive 30 minute observations as recorded by classroom staff.

How could we change this to reflect possible **Skill Deficits** for Alex?

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Possible Skill Deficits for Alex

Requesting Help

Requesting a Break

Sensory modulation skills (distracted by environment)

Requesting sensory tools

Expressive communication

Requesting needs

Ignoring distractions

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Possible Replacement Behaviors for Alex

Teach Help

Raising hand

Coping/sensory strategies

Coming to teacher when he needs something

Asking for headphones

Given a break card to show the teacher

Requesting seating (wiggle cushion)

Teaching how to use a First/Then board

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Partial Interval Data for Alex

In a classroom, Alex will reduce the incidence of off-task behaviors (tongue clicking, hand flapping, and rocking) to 20% of observed intervals in three out of four consecutive 30 minute observations as recorded by classroom staff.

Data for Off Task Behaviors (tongue clicking, hand flapping, and rocking)

Date	5 min	5 min	5 min	5 min	5 min	5 min	%
5/7	X	X	X	X		X	83%
5/8	X		X	X		X	66%
5/9		X		X		X	50%

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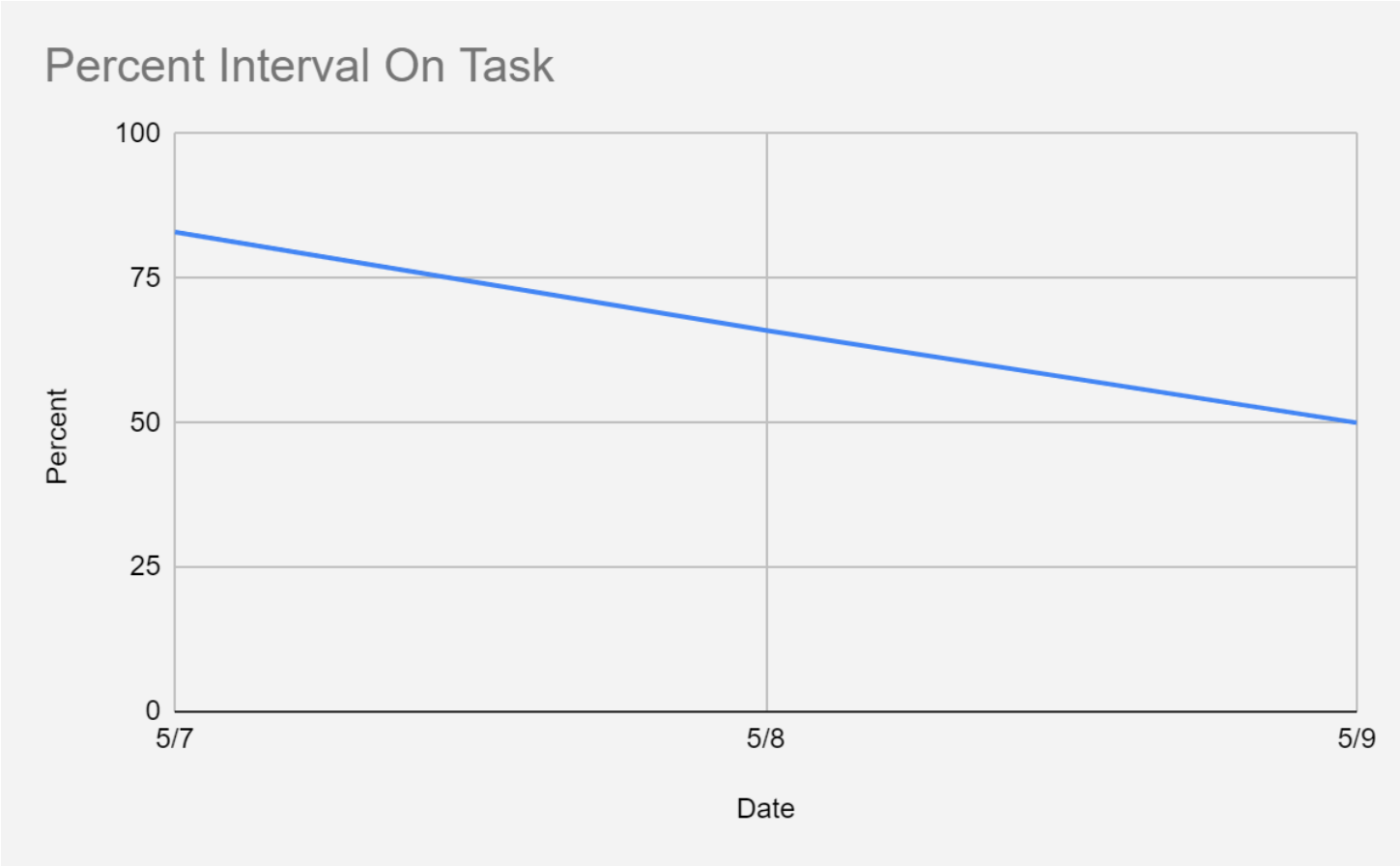
Alex Data Graphed



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Avoid referencing Outcomes as Goals.
Focus on Skill Deficits.
What skills are interfering with the child's ability to reach those outcomes we expect for all children?
What skills are you teaching?

5. MEASURABLE ANNUAL GOAL(S) (MUSER IX.3.A.(1)(b) & (c))

ACADEMIC PERFORMANCE (Part B, ages 3 - 20) refers to a child's ability to perform age appropriate (comparable to same age/grade peers) tasks and demonstrate appropriate skills in *reading, writing, listening, speaking,* and *mathematical problem solving* in the school environment.

Present Levels of Academic Performance (MUSER IX.3.A.(1)(a)(i) & (ii)):
Insert PL of Replacement Behavior here

Measurable Goal (MUSER IX.3.A.(1)(b) & (c)
By date, given service, child's name will skill as measured by evidence.
By (DATE), given Specially Designed Instruction, Alex will (REPLACEMENT BEHAVIOR HERE), as measured by (DATA HERE).

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Consider

<u>Interval 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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Assessment Strategies for Young Children

"Maine's Early Learning and Development Standards (MELDS) is not meant to be used in isolation, or as a tool for screening and/or assessing preschoolers; rather it should be considered one piece of information to help an early childhood educator plan experiences for preschoolers that offer opportunities for practice, refinement, and mastery of a wide array of developmental skills and abilities across the three to five year old continuum."

(P.16)

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Remote Formative Assessment Strategies for Young Children

Use Interval Data Collection for:

- Observation of children's interactions at the beginning of the year and documenting their growing independence in working with others as the year progresses.
- Observation of children during group lessons and documentation of their thinking or learning demonstrated in informal comments or conversations.
- Examination of children's writing samples in journals, on pictures, or other authentic writing experiences that are provided through hardcopy or digitally.
- Children's use of vocabulary and language structure in informal routines and activities.
- Monitoring a premade checklist for use of target language during remote sessions.

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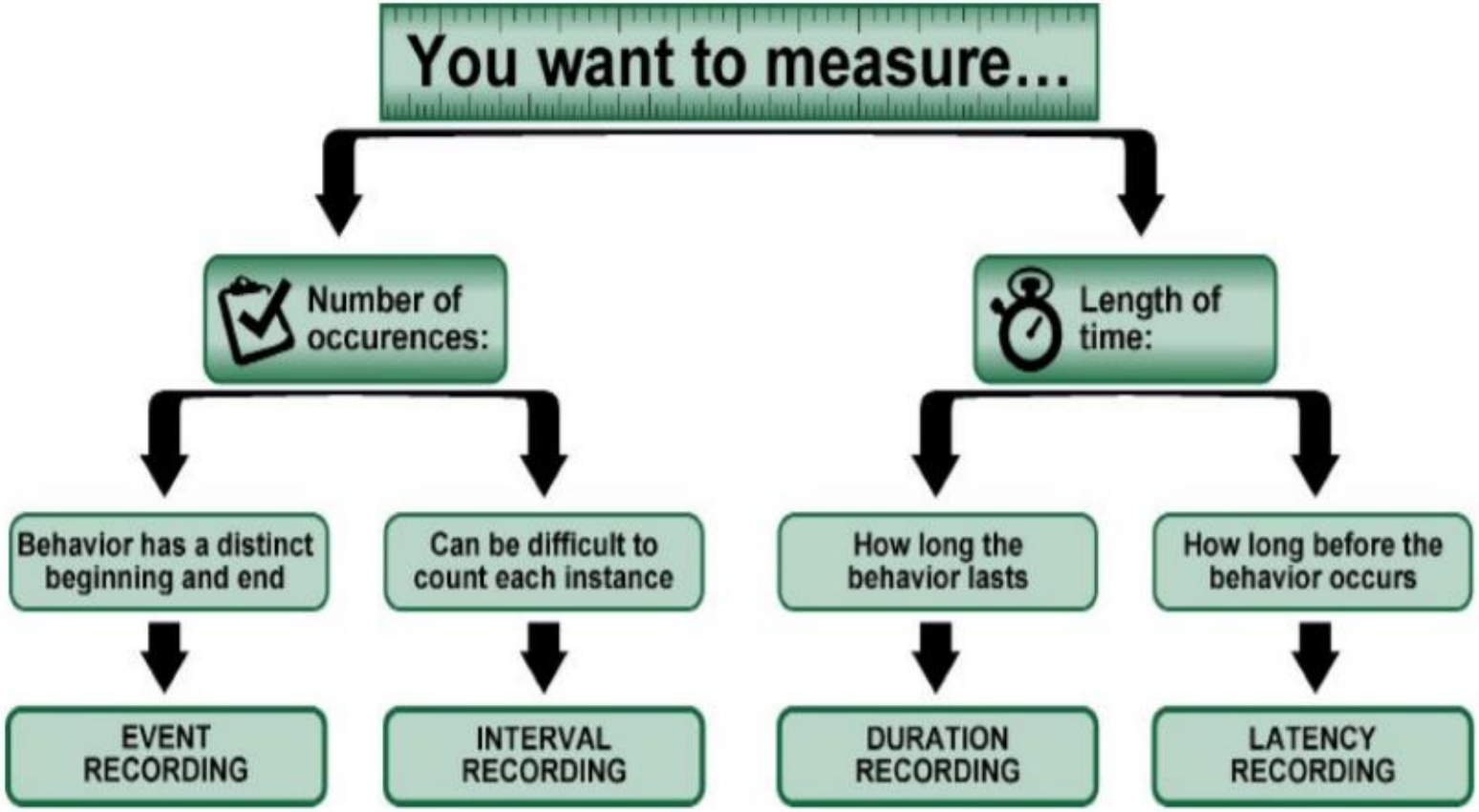
http://www.doe.mass.edu/covid19/learn-at-home.html

Remote Formative Assessment Strategies for Young Children

Use Interval Data Collection for:

- Using a checklist/rubric for observation or specific skills/knowledge (e.g., children's retelling of a story and responses to questions).
- Creating rubrics for ongoing observation to determine progress and acquisition of various skills. (e.g., a writing continuum, matching letters with sounds, etc.).
- Engaging in frequent conversations with children and documenting vocabulary use, concept development, etc. (e.g., for mathematics - shapes, numbers, patterns, etc.).
- Reviewing children's drawings and text (dictated or written) to determine understanding of connections between text and illustrations.
- Using illustrations from a book read aloud to discern children's understanding of characters, events, etc.

The Iris Center – A STAR Sheet – Strategies and Resources



Adapted from Alberto & Troutman (2006).

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Alex exhibits off task behavior during Circle Time.

Off task behavior is defined as "Any instance of the following: tongue clicking, hand flapping, and rocking, that interferes with his ability to attend to Circle Time activities."

His teacher is concerned and wants to track this more efficiently in order to identify skill deficits, and work to develop replacement behavior.

Which data collection system would you use?

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POLL

Which data collection system would you choose?

- **ABC**
- **Frequency**
- **Rate**
- **Duration**
- **Latency**
- **Interval**

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Thoughts and Questions

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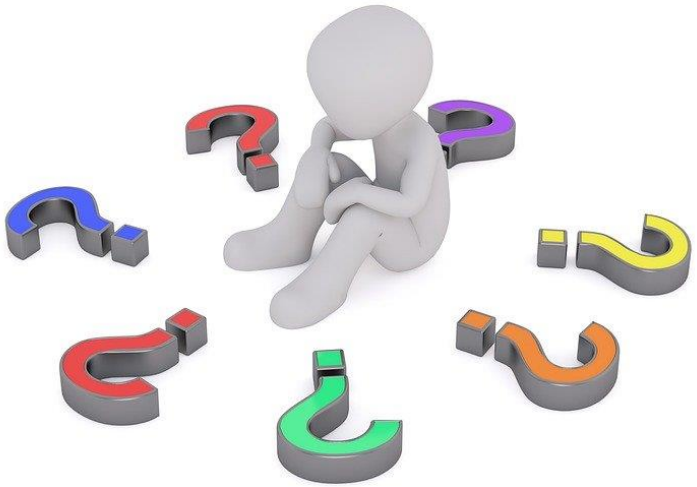
Chat Box Check In

For tomorrow… Please consider how your participation in this Data Series has impacted your programming moving forward?



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Maine DOE is offering Contact Hours for each Special Services Zoom meeting you view.

Please follow these steps:

1. Email Leora Byras at leora.byras@maine.gov at **the completion of the Training** with the codes for each Zoom meeting you viewed. You may have up to 21 codes.
2. You **may** re-watch both Zoom meetings that have been previously recorded.
3. Allow at least **5 business days** to receive your certificate of participation.

Code for Contact Hours

- Code will be shared in Chat Box

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Please let us know...

What questions do you have?

How can we support you?

Education

All **Maine Educators**

We Appreciate You So Much!

Thank you for how hard you ALL continue to work.

Maine Department of Education

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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