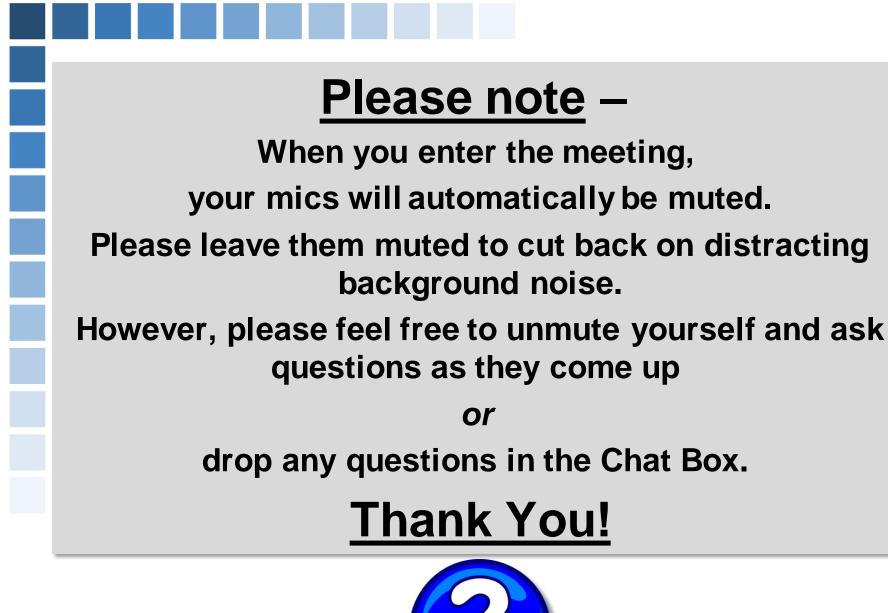
Please put the following information in the <u>Chat Box</u>:

- 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?











Office of Special Services CDS

Data Collection: Where To Begin



Zoom Meeting Date:

Tuesday 7/14/2020



Roberta Lucas – Federal Programs Coordinator roberta.lucas@maine.gov

Leora Byras – Special Education Consultant <u>leora.byras@maine.gov</u>

Anne-Marie Adamson – Special Education Consultant anne-marie.adamson@maine.gov

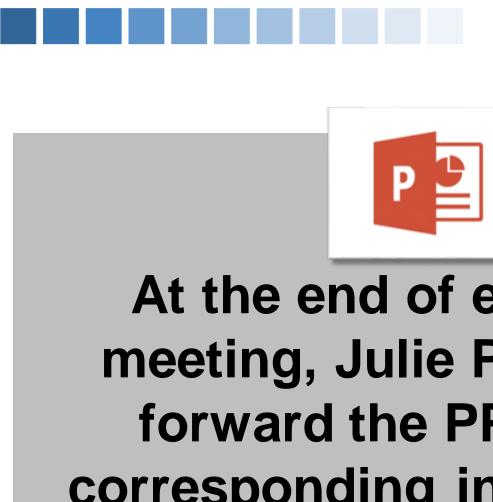
Colette Sullivan – Special Education Consultant colette.sullivan@maine.gov





<u>Data: Where to Begin –</u> Tuesday 7/14/2020	Data: ABC Wednesday 7/15/2020	Data: ABC – ExtendedThursday 7/16/2020Data: Duration/Frequency –Exemplars and PracticeThursday 7/23/2020	
Data: Duration/Frequency Tuesday 7/21/2020	<u>Data: Duration/Frequency –</u> <u>Extended</u> Wednesday 7/22/2020		
<u>Data: Latency</u> Tuesday 7/28/2020	<u>Data: Latency – Extended</u> Wednesday 7/29/2020	<u>Data: Latency –</u> <u>Exemplars and Practice</u> Thursday 7/30/2020	
<u>Data: Interval</u> Tuesday 8/4/2020	<u>Data: Interval – Extended</u> Wednesday 8/5/2020	<u>Data: Intervals –</u> <u>Exemplars and Practice</u> Thursday 8/6/2020	
<u>Data: IEP Training</u> Tuesday 8/11/2020	Data: IEP Training Wednesday 8/12/2020	<u>Data: IEP Training</u> 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	





At the end of each Zoom meeting, Julie Pelletier will forward the PP, and any corresponding information to Regional Directors to share.



<u>FYI</u>

- Please let us know if the pace of the presentation is too fast.
- We are working to upload all PD PowerPoints on the website for your access.





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.

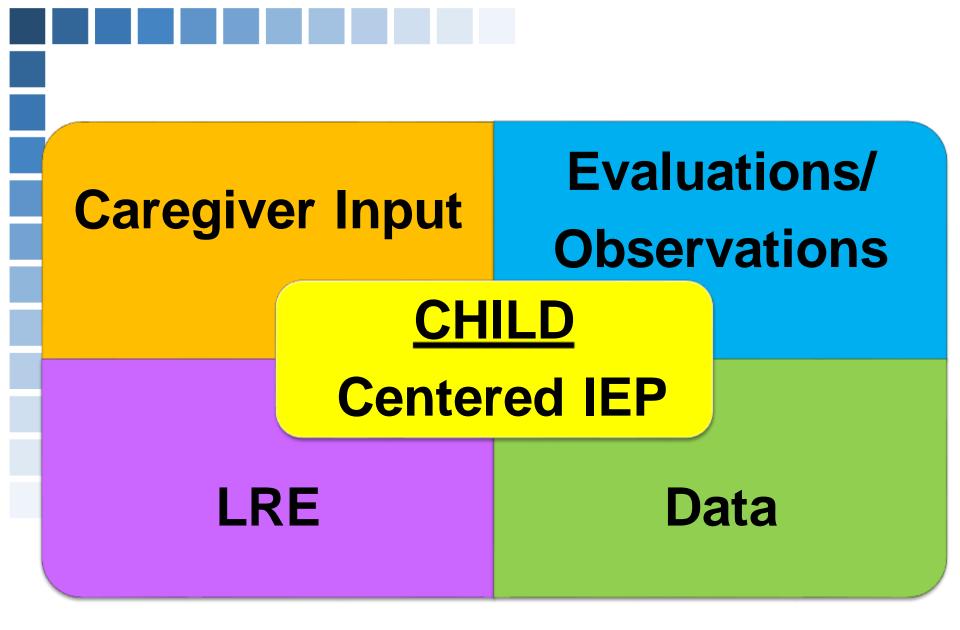
> All material has been prepped, but will be modified and adapted based on your feedback.

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.







Based on communication and guidance from the US Department of Education, and supported by our State **Special Education Director, Erin Frazier, MDOE** wants to ensure that data collection continues to happen during this time of the COVID-19 pandemic, and beyond.

<u>Connect back to 4 Priorities</u> <u>for Special Education</u>



Council of Administrators of Special Education – <u>CASE</u>

May 1, 2020



#WeKeepLeading





Provide FAPE - Deliver services to as many students as you reasonably can in the best way you know how.



Document your efforts; make sure documentation is focused, consistent, detailed and demonstrates a good faith effort to provide good services.



Compliance during the pandemic - IDEA wasn't built for this.



https://docs.google.com/presentation/d/16YelFmVuXH1ulrzD75ZGFBliLWV xkU7Pb_3G6u1MtdQ/edit#slide=id.g81987b82be_0_53

We want to do it all.

<u>But</u>...

Where should the focus be? What will make the most impact? How can I document it?



Data collection during COVID-19 includes many variables outside our control.

<u>So</u>...

Maintain Equal Access

And

How can we use <u>Data</u> to paint the story of what's happening right now?



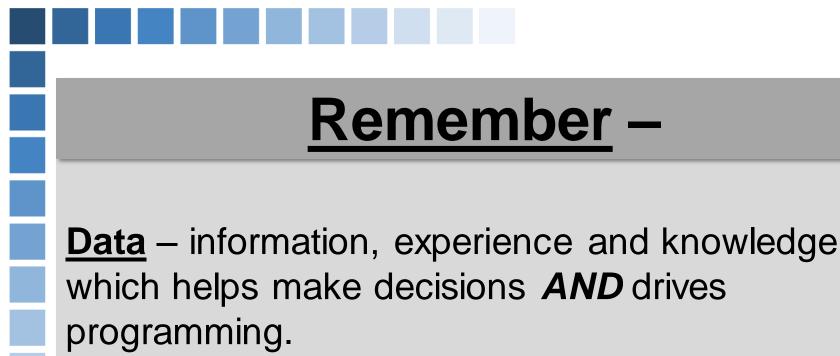
Use of Data

Data should be used to:

✓ assist in program effectiveness✓ determining the need for change







So, although not everyone <u>collects</u> data, everyone should be <u>looking</u> at it and <u>considering</u> it when <u>developing programming</u>.



Chat Box Check In

- What does data mean to you?
- What do you want to learn about data?
- Why do you take data?





Chat Box Check In

• How do you use data?

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 How do you know what kind of data to collect and analyze?



Chat Box Check In

- What are some common forms of data you use in your day to day life?
- How does it shape your behavior?



Data Collection

Definition

Data collection is collecting specific information about a student's academic or behavioral performance. Collecting data helps an instructor determine a program's effectiveness. By collecting and analyzing data on a systematic basis, an instructor knows when to make changes in both academic and behavior programs.

Data collection has two critical components: information gathering and decision making. Information gathering may involve curriculum-based assessment, observing classroom behavior, grading papers, or parent interviews. The more structured and systematic the process, the more valid the information. Once the data is collected, the instructor must then make decisions based on that information. Decisions might be made regarding changes in curriculum or the management of specific classroom behaviors.

- used to track <u>academic</u> and/or <u>behavior</u> performance
- determines the <u>effectiveness</u> of programming
- needs to be <u>systematic</u> and <u>intentional</u>
- MUST include information gathering and decision making
- MUST be considered when making programming decisions

Maine Department of Education

Things to Do –

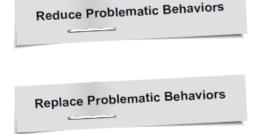
- ✓ Select the Academic Skill and/or Behavior
- ✓ Define the Skill or Target Behavior(s)
- ✓ Choose a data collection system
- ✓ Determine when to collect data
- \checkmark Implement the data collection system
- ✓ Summarize and graph data
- Utilize data to make decisions about program effectiveness

Select the Skill and/or Behavior

- Define the skill and/or behavior in <u>descriptive</u> words so that anyone can clearly identify the target.
- If looking to <u>reduce</u> a behavior, identify and teach the <u>replacement</u> behavior.

Example:

Don't tell a student, "Hands Down."



Teach them what you DO want them to do.

Instead of defining what a person should *not* do, identify and teach what they *should* be doing.



Define the Target Behavior(s)

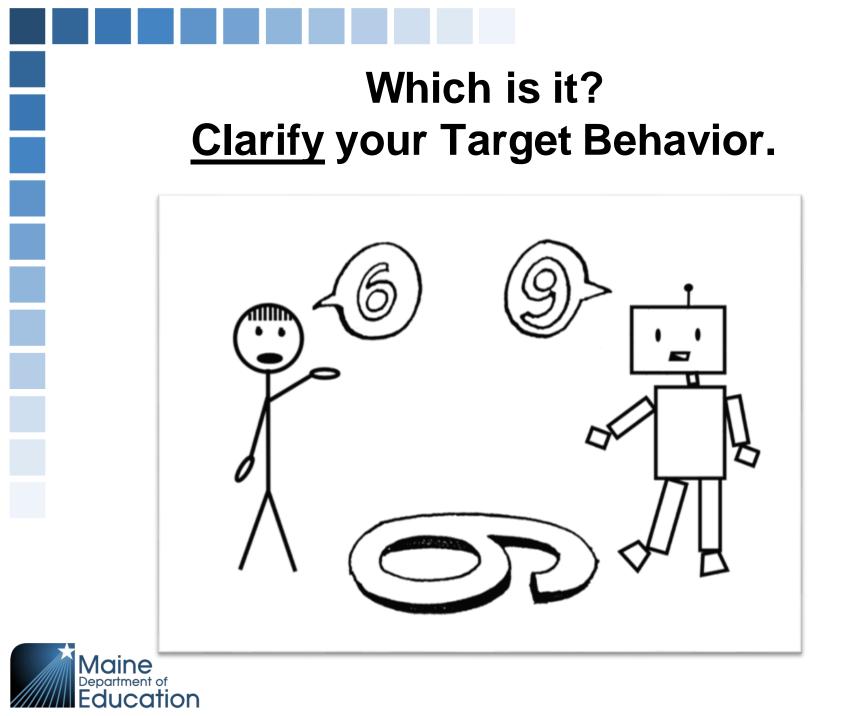
The definition identifies the target in ways that:

- Easily observed
- Countable



- Have a clear beginning
- Have a clear ending
- Pinpoint <u>when</u> and under <u>what</u> conditions the behavior occurs

Maine <u>http://iseesam.com/content/teachall/text/behavior/LRBIpdfs/Data.pdf</u> Education



Choose a Data Collection System

We use a variety of data collection techniques.

Your Data Collection System is dependent on <u>what</u> you are intending to measure.



Determine When to Collect Data

Determine the **when** based on the following:

- Target Behaviors
- Frequency
- Available Resources

Daily schedule						
MONDAY TUESDAY THURSDAY FRIDAY			WEDNESDAY			
7:45 - 8:00	HOMEROOM		7:45 - 8:00	HOMEROOM		
8:00 - 8:30	MATH SKILLS		8:00 - 8:50	MORPHOLOGY/READING		
8:30 - 9:50	MATH		8:50 - 9:50	WRITING		
9:50 - 10:05	RECESS		9:50 - 10:05	RECESS		
10:10 - 10:40	MORPHOLOGY		10:10 - 11:35	CONTENT		
10:40 - 11:35	READING		11:35 - 12:10	LUNCH/RECESS		
11:35 - 12:10	LUNCH/RECESS		12:15 - 1:15	MATH		
12:15 - 1:00	CONTENT/RESOURCE					
1:00 - 2:00	WRITING	STUDENTS ARE RELEASED AT 1:15 PM ON WEDNESDAYS				

For Example –

A teacher interested in collecting data on Math performance may collect information during and after a math session, while behaviors might be better assessed during less structured times, like recess or lunch.



Implement the Data Collection System

- Once the data schedule has been established, stick to it.
- Consistent data collection tells the best story.
- Data can be analyzed effectively and program changes can be made once if data is consistent.

STicK

To iT!

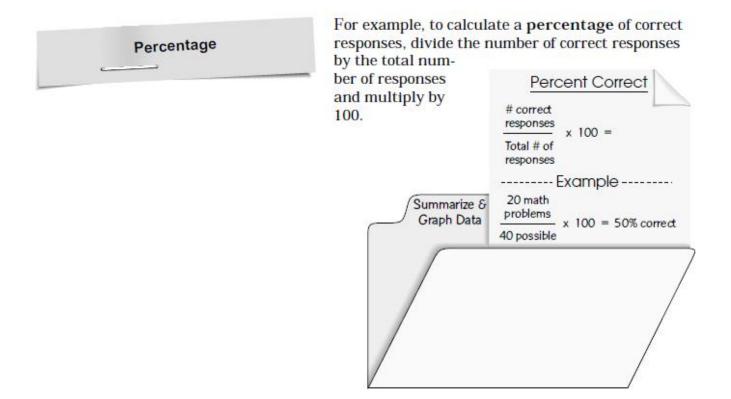
- Interobserver reliability is good practice.
 - Have 2 observers...
 - Record the SAME behavior...
 - Of the SAME student...
 - At the SAME time!

Department of <u>http://iseesam.com/content/teachall/text/behavior/LRBIpdfs/Data.pdf</u>

- Raw data, like tallies, are hard to interpret.
- All info gathered through data must be easily readable.
- Graphing provides an easy, systematic way of showing the information about the skill or target behavior.
- Raw data must be converted to a usable form, such as percentages, number correct or rate.

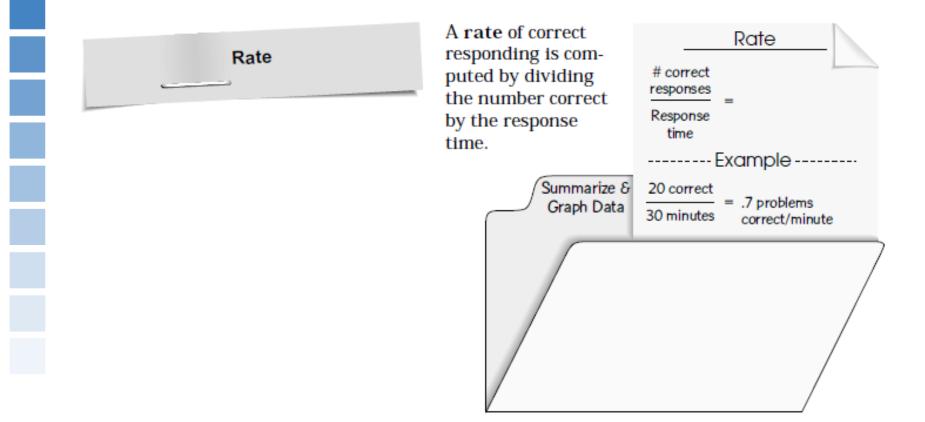
http://iseesam.com/content/teachall/text/behavior/LRBIpdfs/Data.pdf





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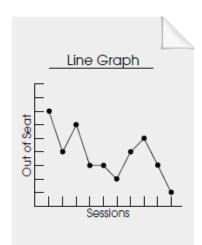
ducation

There are several types of graphs that can be used. These include:

- Basic line graph
- Cumulative graph
- latio graph 🖄
- 🖄 🛛 Bar graph

The most frequently used tool for displaying data is the basic line graph. The line graph includes two axes, the horizontal or *x*-axis and the vertical or *y*-axis. The axes are labeled with the time dimension (e.g.,

session, day, hour) placed on the xaxis and the description of behavior (e.g., talk-outs, contributions, praise statements) placed on the yaxis. Each data point is placed at the intersection of the session in which it occurred and the level of behavior.





Utilize Data to Make Decisions About Program Effectiveness

- Data should be a continuous, ongoing process.
- Data helps determine trends.
- Data highlights <u>increases</u> or <u>decreases</u> in performance.
- Look for trends of 3 or more data points in the same direction.
- Data trends should be used to assist in program effectiveness or determining the need for change.

Department of <u>http://iseesam.com/content/teachall/text/behavior/LRBIpdfs/Data.pdf</u> Education

Thoughts? Questions?





"It is not a question of starting. The start has been made. It's a question of what's to be done from now on?"

B. F. Skinner

www.thefamouspeople.com





Quantitative Data

versus

Qualitative Data

Qualitative Data

is descriptive rather than numeric.

Quantitative Data

is in the form of numbers, quantities and values.



<u>Quantitative Data versus</u> <u>Qualitative Data</u>

<u>Quantitative Research</u> is based on numbers and mathematical calculations. (aka **Quantitative Data**)

<u>Qualitative Research</u> is based on written or spoken narratives. (aka **Qualitative Data**)



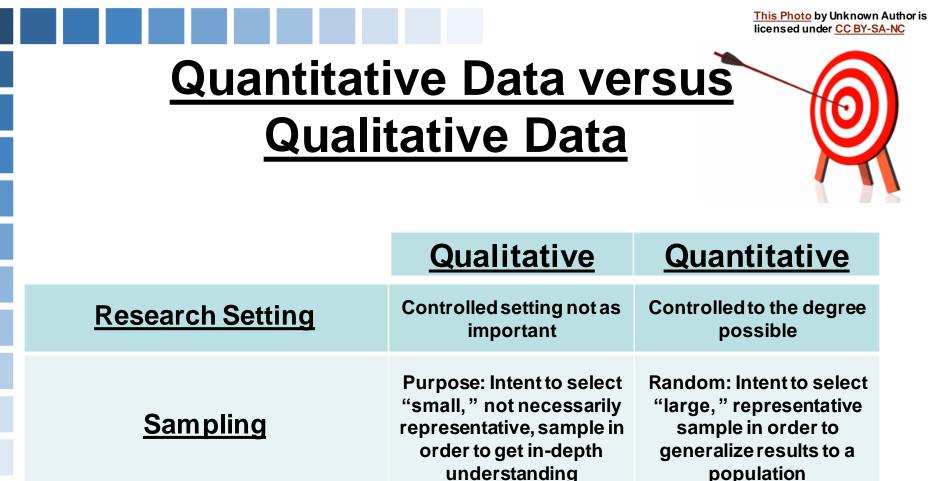


https://www.diffen.com/difference/Qualitative vs Quantitative

		This Photo by Unknown Author is licensed under <u>CC BY-SA-NC</u>							
Quantitative Data versus									
Qualitative Data									
	<u>Qualitative</u>	<u>Quantitative</u>							
<u>Purpose</u>	The purpose is to explain and gain insight and understanding of phenomena through intensive collection of narrative data Generate hypothesis to be test, inductive.	The purpose is to explain, predict, and/or control phenomena through focused collection of numerical data. Test hypotheses, deductive.							
Approach to Inquiry	subjective, holistic, process- oriented	Objective, focused, outcome- oriented							
Hypotheses	Tentative, evolving, based on particular study	Specific, testable, stated prior to particular study							



https://www.diffen.com/difference/Qualitative vs Quantitative



<u>Measurement</u>

Non-standardized, narrative (written word), ongoing

Standardized, numerical (measurements, numbers), at the end



https://www.diffen.com/difference/Qualitative vs Quantitative

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Quantitative Data versus Qualitative Data

	Qualitative	Quantitative
Design and Method	Flexible, specified only in general terms in advance of study Nonintervention, minimal disturbance All Descriptive— History, Biography, Ethnography, Phenomenology, Grounded Theory, Case Study, (hybrids of these) Consider many variable, small group	Structured, inflexible, specified in detail in advance of study Intervention, manipulation, and control Descriptive Correlation Causal-Comparative Experimental Consider few variables, large group
<u>Data Collection</u> <u>Strategies</u>	Document and artifact (something observed) that is collection (participant, non-participant). Interviews/Focus Groups (un- /structured, in-/formal). Administration of questionnaires (open ended). Taking of extensive, detailed field notes.	Observations (non-participant). Interviews and Focus Groups (semi-structured, formal). Administration of tests and questionnaires (close ended).

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https://www.diffen.com/difference/Qualitative vs Quantitative

Quantitative Data versus Qualitative Data

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	<u>Qualitative</u>	<u>Quantitative</u>
<u>Data Analysis</u>	Raw data are in words. Essentially ongoing, involves using the observations/comments to come to a conclusion.	Raw data are numbers Performed at end of study, involves statistics (using numbers to come to conclusions).
Data Interpretation	Conclusions are tentative (conclusions can change), reviewed on an ongoing basis, conclusions are generalizations. The validity of the inferences/generalizations are the reader's responsibility.	Conclusions and generalizations formulated at end of study, stated with predetermined degree of certainty. Inferences/generalizations are the researcher's responsibility. Never 100% certain of our findings.

https://www.diffen.com/difference/Qualitative vs Quantitative



Analysis of Data

<u>Qualitative Data</u>: can be difficult to analyze, especially at scale, as it cannot be reduced to numbers or used in calculations. Responses may be sorted into themes and require an expert to analyze. Different researchers may draw different conclusions from the same qualitative material.

Quantitative Data: can be ranked or put into graphs and tables to make it easier.





https://www.diffen.com/difference/Qualitative vs Quantitative

<u>Example of</u> <u>Qualitative Data versus</u> <u>Quantitative Data</u>

Example:

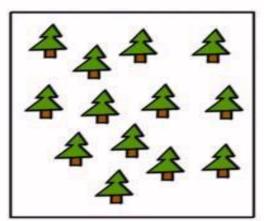
There are 13 trees in the 6 acre area.

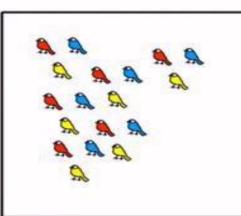
The birds in the 6 acre area are blue, red, and yellow.

Qualitative and Quantitative Observations

From Sophia.org

Quantitative Qualitative





13 Trees Blue, Red, and Yellow Birds



<u>Converting Qualitative Data</u> into Quantitative Data

- How many **red birds** are in the 6 acre area?
- How many blue birds are in the 6 acre area?
- How many yellow birds are in the 6 acre area?





Why is Quantitative Data important?

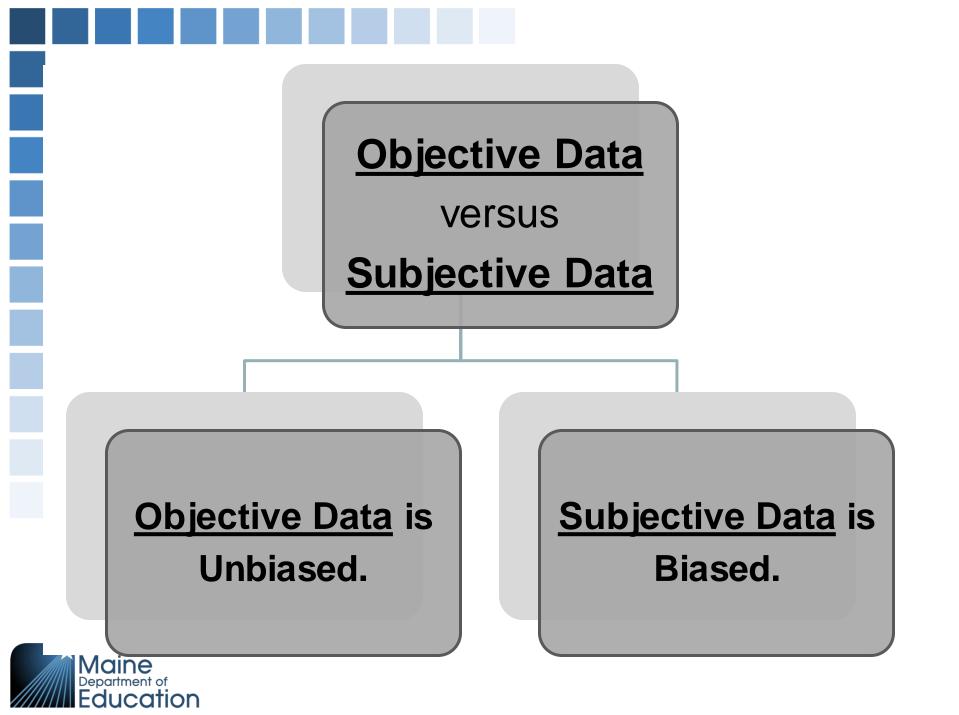
Data needs to support movement or progress through the IEP.

- A child's IEP goal development should not be based upon qualitative (subjective) data.
- For proper progress monitoring IEP Goals, the measures must be data-driven.



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Department of https://learningabledkids.com/iep training/iep measures of progress idea specs.htm Education

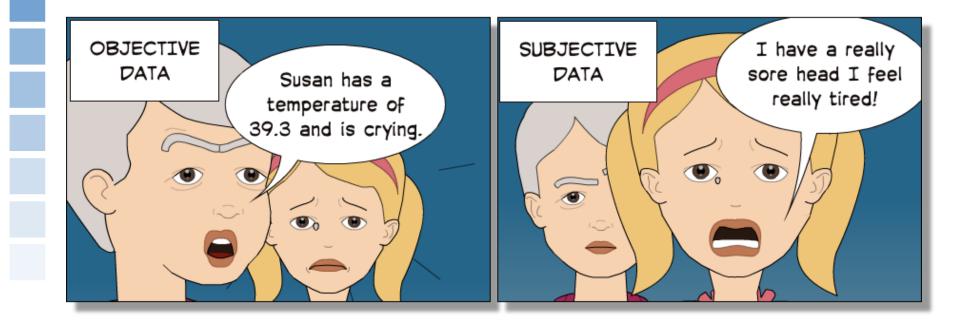


Objective Data versus Subjective Data

Objective Data	Subjective Data
not colored by personal feelings or beliefs	colored by personal feelings or beliefs
equivalent to facts	equivalent to opinions
Factual and verifiable	Non-factual and non-verifiable



Objective Data versus Subjective Data



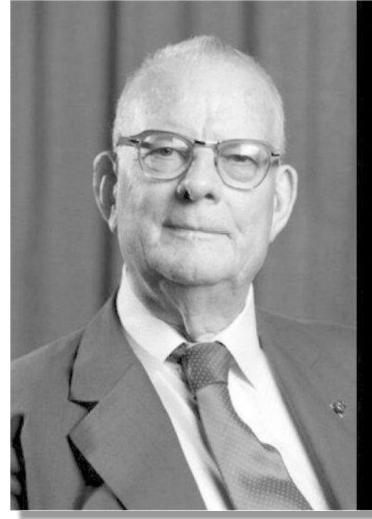


<u>Poll</u>

For well-written, objective goals, which of these ways are <u>Objective</u> measures of progress?

- A. Data collection and analysis.
- B. Teacher observation.
- C. Standardized testing.
- D. A percentage of improvement.

https://learningabledkids.com/iep training/iep measures of progress idea specs.htm



"Without data you're just another person with an opinion."

> - W. Edwards Deming, Data Scientist



IEP meetings are more meaningful and useful when there is –







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Ongoing Resource List:

Council of Administrators of Special Education - CASE https://docs.google.com/presentation/d/16YelFmVuXH1ulrzD75ZGFBliLWVxkU7Pb_3G6u1 MtdQ/edit#slide=id.g81987b82be_0_53

Data Collection

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

Qualitative Data versus Quantitative Data https://www.diffen.com/difference/Qualitative vs Quantitative

Learning Abled Kids https://learningabledkids.com/iep_training/iep_measures_of_progress_idea_specs.htm

> Early Childhood Technical Assistance Center https://ectacenter.org/~pdfs/events/Assessment Tool Table.pdf



Maine DOE is offering Contact Hours for each <u>Special Services</u> Zoom meeting you view.

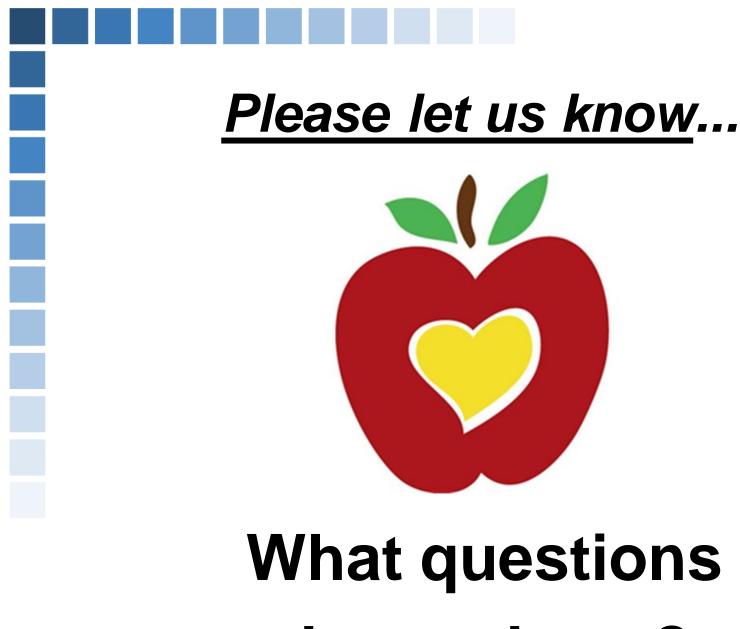
Please follow these steps:

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

Code for Contact Hours

- Code will be shared in Chat Box





What questions do you have?





Chat Box Check In







Roberta Lucas – Federal Programs Coordinator roberta.lucas@maine.gov

Leora Byras – Special Education Consultant <u>leora.byras@maine.gov</u>

Anne-Marie Adamson – Special Education Consultant anne-marie.adamson@maine.gov

Colette Sullivan – Special Education Consultant colette.sullivan@maine.gov



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

