



National Center and State Collaborative

Mathematics Instructional Families – Data, Probability and Statistics

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The National Center and State Collaborative (NCSC) is applying the lessons learned from the past decade of research on alternate assessments based on alternate achievement standards (AA-AAS) to develop a multi-state comprehensive assessment system for students with significant cognitive disabilities. The project draws on a strong research base to develop an AA-AAS that is built from the ground up on powerful validity arguments linked to clear learning outcomes and defensible assessment results, to complement the work of the Race to the Top Common State Assessment Program (RTTA) consortia.

Our long-term goal is to ensure that students with significant cognitive disabilities achieve increasingly higher academic outcomes and leave high school ready for post-secondary options. A well-designed summative assessment alone is insufficient to achieve that goal. Thus, NCSC is developing a full system intended to support educators, which includes formative assessment tools and strategies, professional development on appropriate interim uses of data for progress monitoring, and management systems to ease the burdens of administration and documentation. All partners share a commitment to the research-to-practice focus of the project and the development of a comprehensive model of curriculum, instruction, assessment, and supportive professional development. These supports will improve the alignment of the entire system and strengthen the validity of inferences of the system of assessments.



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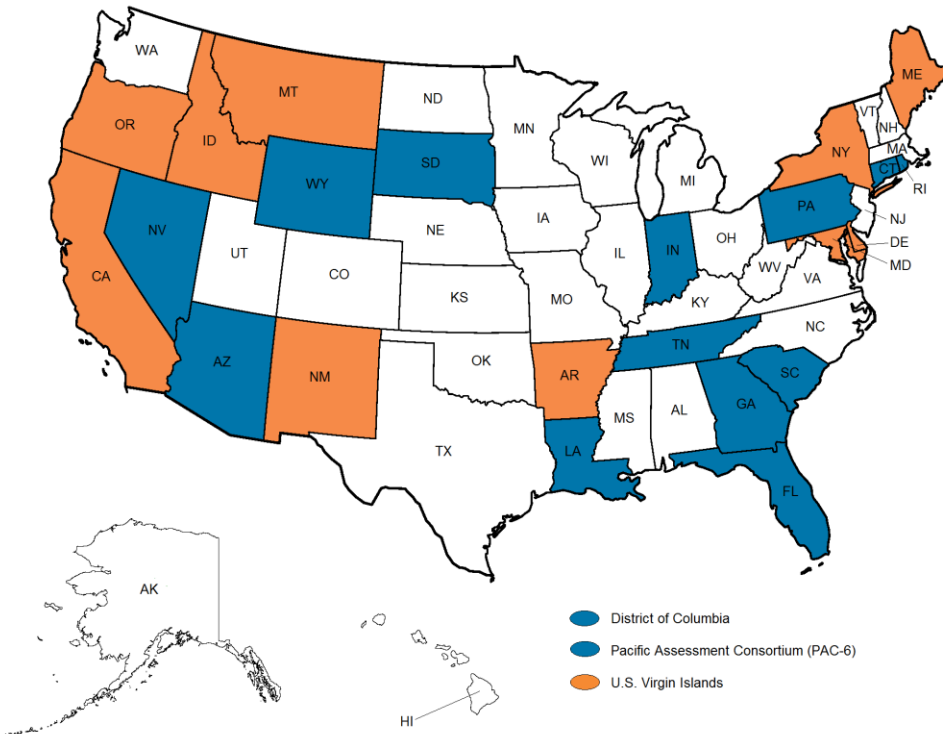
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NCSC is a collaborative of 15 states and five organizations.

The states include (shown in blue on map): Arizona, Connecticut, District of Columbia, Florida, Georgia, Indiana, Louisiana, Nevada, Pacific Assessment Consortium (PAC-6)¹, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, and Wyoming.

Tier II states are partners in curriculum, instruction, and professional development implementation but are not part of the assessment development work. They are (shown in orange on map): Arkansas, California, Delaware, Idaho, Maine, Maryland, Montana, New Mexico, New York, Oregon, and U.S. Virgin Islands.



*Core partner states are blue in color and Tier II states are orange in color.

¹ The Pacific Assessment Consortium (including the entities of American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Guam, Republic of Palau, and Republic of the Marshall Islands) partner with NCSC as one state, led by the University of Guam Center for Excellence in Developmental Disabilities Education, Research, and Service (CEDDERS).



National Center and State Collaborative

The five partner organizations include: The National Center on Educational Outcomes (NCEO) at the University of Minnesota, The National Center for the Improvement of Educational Assessment (Center for Assessment), The University of North Carolina at Charlotte, The University of Kentucky, and edCount, LLC.



150 Pillsbury Drive SE
207 Pattee Hall
Minneapolis, MN 55455
Phone: 612-708-6960
Fax: 612-624-0879
www.ncscpartners.org



National Center and State Collaborative

Mathematics Instructional Families –Data, Probability and Statistics

William Kliche
Bill Herrera
Shawnee Wakeman
Angela Lee
Charlene Turner
Mariel Zeller
NCSC Partner States

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Table of Contents

View of Learning Targets and Families across Grades	7
Distribution of Instructional Families: Data Analysis I and II	8
View of Learning Targets, Families, and CCCs by Grade-band	9
Overview of CCCs: Data Analysis I	10
Overview of CCCs: Data Analysis I	12
Overview of CCCs: Data Analysis II	14
Overview of CCCs: Data Analysis I	16
Overview of CCCs: Data Analysis II	17
View by Instructional Families and CCSS Domains	18
Instructional Families: Data Analysis I	19
Instructional Families: Data Analysis II	23

View of Learning Targets and Families across Grades

Distribution of Instructional Families: Data Analysis I and II

(K-4) Elementary School Learning Targets					(5-8) Middle School Learning Targets				(9-12) High School Learning Targets
<p>E.DPS-1 <i>Gather and interpret data to answer questions related to a particular/single context.</i></p> <ul style="list-style-type: none"> • <i>Formulate questions, gather data, and build representations;</i> • <i>Identify and describe variation in data, and describe and compare shapes of distributions and measures of central tendency.</i> 					<p>M.DPS-1 <i>Design investigations and gather data to answer questions about multiple populations.</i></p> <ul style="list-style-type: none"> • <i>Formulate questions, gather data, and build representations;</i> • <i>Compare populations by analyzing distributions in terms of variability and measures of central tendency.</i> 				<p>H.DPS-1 <i>Design and conduct statistical studies:</i></p> <ul style="list-style-type: none"> • <i>Use appropriate statistical measures for analysis;</i> • <i>Develop the concepts of statistical inference and statistical significance, especially in relation to probability principles and sampling distributions.</i>
<p>E.DPS-2 <i>Conduct simple probability experiments and characterize the outcomes in words, diagrams, or numerically.</i></p>					<p>M.DPS-2 <i>Conduct probability experiments:</i></p> <ul style="list-style-type: none"> • <i>Generate random samples to characterize variability in estimates and predictions;</i> • <i>Analyze and build models of the association between two variables.</i> 				<p>H.DPS-2 <i>Use the rules of probability to interpret data, develop explanations, and address real-world problems</i></p>
K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	HS

Formulate Questions/ Plan Research	Represent and Interpret Data	Draw Conclusions from Data Collection	Develop and Use Probability Models	Draw Inferences About a Distribution
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View of Learning Targets, Families, and CCCs by Grade-band

Overview of CCCs: Data Analysis I

(K-4) Elementary School Learning Targets							
<i>E.DPS-1 Gather and interpret data to answer questions related to a particular/single context.</i> <ul style="list-style-type: none"> • <i>Formulate questions, gather data, and build representations;</i> • <i>Identify and describe variation in data, and describe and compare shapes of distributions and measures of central tendency.</i> 							
Formulate Questions/ Plan Research		Represent and Interpret Data		Draw Conclusions from Data Collection			
Grades K-1		Grade 2		Grade 3		Grade 4	
K.DPS.1a1 Select a question that is answered by collected data <i>K.CC.5</i>		2.DPS.1a5 Select a question about 3 attributes that can be concretely represented <i>1.MD.4</i>		3.DPS.1f1 Develop questions, make a plan for data collection <i>No CCSS linked</i>		4.DPS.1f2 Develop questions, make a plan for data collection <i>No CCSS linked</i>	
1.DPS.1a2 Select questions that ask about “How many” and represent up to three categories that can be concretely represented <i>1.MD.4</i>		2.DPS.1a6 Identify up to 3 categories resulting from a selected question <i>1.MD.4</i>		3.DPS.1g1 Collect data, organize into picture or bar graph <i>3.MD.3</i>		4.DPS.1g3 Collect data, organize in graph (e.g., picture graph, line plot, bar graph) <i>3.MD.3</i>	
1.DPS.1a3 Identify 2 categories resulting from a selected question <i>1.MD.4</i>		2.DPS.1a7 Analyze data by sorting into categories established by each question <i>2.MD.10</i>		3.DPS.1g2 Organize measurement data into a line plot <i>3.MD.4</i>		4.DPS.1i1 (repeated) Select the appropriate statement that describes the data representations based on a given graph (picture, bar, line plots) <i>3.MD.3</i>	
1.DPS.1a4 Analyze data by sorting into 2 categories; answer questions about the total number of data points and how many in each category <i>1.MD.4</i>		2.DPS.1a8 Interpret the number of points in each category <i>No CCSS linked</i>		3.DPS.1i1 Select the appropriate statement that describes the data representations based on a given graph (picture, bar, line plots) <i>3.MD.3</i>		4.DPS.1j1 Select an appropriate statement that describes the most frequent or the least frequent data point using a line plot, picture graph, or bar graph <i>4.G.1</i>	
		2.DPS.1c2 Organize data by representing categorical data on a pictorial graph or bar graph <i>2.MD.10</i>					
1.DPS.1c1 Using a picture graph, represent each object/person counted on the graph (1:1 correspondence) for 2 or more categories <i>1.MD.4</i>		2.DPS.1c3 Organize data by representing continuous data on a line plot <i>2.MD.9</i>		3.DPS.1k1 Apply results of data to a real-world situation <i>No CCSS linked</i>		4.DPS.1k2 Apply results of data to a real-world situation <i>3.MD.4</i>	

(K-4) Elementary School Learning Targets

E.DPS-1 *Gather and interpret data to answer questions related to a particular/single context.*

- *Formulate questions, gather data, and build representations;*
- *Identify and describe variation in data, and describe and compare shapes of distributions and measures of central tendency.*

Formulate Questions/ Plan Research		Represent and Interpret Data		Draw Conclusions from Data Collection	
Grades K-1		Grade 2		Grade 3	
Grades K-1		Grade 2		Grade 4	
1.DPS.1d1 Interpret a picture graph to answer questions about how many in each category <i>1.MD.4</i>		2.DPS.1d2 Identify the value of each category represented on picture graph and bar graph or each point on a line plot <i>2.MD.9</i> <i>2.MD.10</i>			
1.DPS.1e1 Compare the values of the 2 categories of data in terms of more or less <i>1.MD.4</i>		2.DPS.1e2 Compare the information shown in a bar graph or picture graph with up to 4 categories. Solve simple comparisons of how many more or how many less <i>2.MD.10</i>			

Overview of CCCs: Data Analysis I

(5-8) Middle School Learning Targets			
<p>M.DPS-1 Design investigations and gather data to answer questions about multiple populations.</p> <ul style="list-style-type: none"> Formulate questions, gather data, and build representations; Compare populations by analyzing distributions in terms of variability and measures of central tendency. 			
Formulate Questions/ Plan Research		Represent and Interpret Data	
Grade 5	Grade 6	Grade 7	Grade 8
5.DPS.1c1 Collect and graph data: bar graph, line plots, picture graph (e.g., average height among 3 classrooms, # of boys and girls) 3.MD.3 5.MD.2	6.DPS.1a2 Identify statistical questions and make a plan for data collection 6.SP.1	7.DPS.1b1 Determine sample size to answer a given question 7.SP.1	8.DPS.1f1 Formulate a research question to study <i>No CCSS linked</i>
	6.DPS.1c2 Collect and graph data: bar graph, line plots, dot plots, histograms 6.SP.4		8.DPS.1f2 Identify two variables to study in a given research question <i>No CCSS linked</i>
5.DPS.1d1 Select an appropriate statement about the range of the data for a given graph (bar graph, line plot) (i.e., range of data) up to 10 points 6.SP.3	6.DPS.1d2 Solve for mean of a given data set 6.SP.3	7.DPS.1i1 Solve for the median of a given data set 6.SP.5C	8.DPS.1f3 Construct a two-way table summarizing data on two categorical variables collected from the same subjects; identify possible association between the two variables 8.SP.4
	6.DPS.1d3 Select statement that matches mean, mode, and spread of data for 1 measure of central tendency for a given data set 6.SP.5		8.DPS.1g2 Graph data using line graphs, histograms, or box plots 8.SP.1
	6.DPS.1d4 Find the range of a given data set 6.SP.2		8.DPS.1h1 Graph bivariate data using scatter plots and identify possible associations between the variables 8.SP.1
5.DPS.1e1 Use measures of central tendency to interpret data including overall patterns in the data 6.SP.3	6.DPS.1d5 Explain or identify what the mean represents in a set of data 6.SP.3	7.DPS.1j1 Make or select a statement to compare the distribution of 2 data sets 7.SP.3	8.DPS.1i3 Using box plots and scatter plots, identify data points that appear to be outliers 8.SP.1
			8.DPS.1i4 Identify outliers, range, mean, median, and mode 6.SP.5c

(5-8) Middle School Learning Targets

M.DPS-1 Design investigations and gather data to answer questions about multiple populations.

- Formulate questions, gather data, and build representations;
- Compare populations by analyzing distributions in terms of variability and measures of central tendency.

Formulate Questions/ Plan Research		Represent and Interpret Data		Draw Conclusions from Data Collection	
Grade 5		Grade 6		Grade 8	
	6.DPS.1d6 Explain or identify what the mode represents in a set of data 6.SP.2	7.DPS.1k1 Analyze graphs to determine or select appropriate comparative inferences about two samples or populations 7.SP.4		8.DPS.1j2 Make or select an appropriate statement based upon two unequal data sets using measure of central tendency and shape 7.SP.4	
	6.DPS.1d7 Explain or identify what the median represents in a set of data 6.SP.5			8.DPS.1k2 Analyze displays of bivariate data to develop or select appropriate claims about those data 8.SP.4	
	6.DPS.1e2 Use measures of central tendency to interpret data including overall patterns in the data 6.SP.5				

Overview of CCCs: Data Analysis II

(5-8) Middle School Learning Targets	
<p>M.DPS-2 Conduct probability experiments:</p> <ul style="list-style-type: none"> • Generate random samples to characterize variability in estimates and predictions; • Analyze and build models of the association between two variables. 	
Develop and Use Probability Models	Draw Inferences About a Distribution
Grade 7	Grade 8
7.DPS.2a1 Conduct simple probability experiments <i>No CCSS link</i>	8.DPS.2e4 Determine the theoretical probability of multistage probability experiments (2 coins, 2 dice) <i>7.SP.8</i>
7.DPS.2d1 Describe the probability of events as being certain or impossible, likely, less likely or equally likely <i>7.SP.5</i>	
7.DPS.2d2 State the theoretical probability of events occurring in terms of ratios (words, percentages, decimals) <i>7.SP.5</i>	8.DPS.2e5 Collect data from multistage probability experiments (2 coins, 2 dice) <i>7.SP.8</i>
7.DPS.2b1 Identify sample space for a single event (coin, spinner, die) <i>No CCSS linked</i>	8.DPS.2e6 Compare actual results of multistage experiment with theoretical probabilities <i>7.SP.8</i>
7.DPS.2d3 Using a tree diagram, represent all possible outcomes of a situation, with up to 3 compound events with 2 or 3 possibilities per category (selecting the color of shirt, pant, type of shoes) <i>7.SP.6</i>	8.DPS.2g1 Distinguish between a linear and non-linear association when analyzing bivariate data on a scatter plot <i>8.SP.2</i>
7.DPS.2d4 Make a prediction regarding the probability of an event occurring; conduct simple probability experiments <i>7.SP.6</i>	
7.DPS.2e1 Determine the theoretical probability of multistage probability experiments (2 coins, 2 dice) <i>7.SP.8</i>	
7.DPS.2e2 Collect data from multistage probability experiments (2 coins, 2 dice) <i>7.SP.8</i>	
7.DPS.2d5 Compare actual results of simple experiment with theoretical probabilities <i>7.SP.7</i>	

(5-8) Middle School Learning Targets

M.DPS-2 Conduct probability experiments:

- Generate random samples to characterize variability in estimates and predictions;
- Analyze and build models of the association between two variables.

Develop and Use Probability Models

Draw Inferences About a Distribution

Grade 7

Grade 8

7.DPS.2e3 Compare actual results of multistage experiment with theoretical probabilities

7.SP.8

Overview of CCCs: Data Analysis I

(9-12) High School Learning Targets		
<p>H.DPS-1 Design and conduct statistical studies:</p> <ul style="list-style-type: none"> Use appropriate statistical measures for analysis; Develop the concepts of statistical inference and statistical significance, especially in relation to probability principles and sampling distributions. 		
Formulate Questions/ Plan Research	Represent and Interpret Data	Draw Conclusions from Data Collection
HS		
H.DPS.1a1 Design study using categorical and continuous data, including creating a question, identifying a sample, and making a plan for data collection S.ID.4 S.ID.5		
H.DPS.1b1 Complete a graph given the data, using dot plots, histograms, or box plots S.ID.1		
H.DPS.1c1 Use descriptive stats; range, median, mode, mean, outliers/gaps to describe the data set S.ID.4 S.ID.5		
H.DPS.1d1 Represent data on a scatter plot to describe and predict S.ID.6		
H.DPS.1c2 Compare means, median, and range of 2 sets of data S.ID.2		
H.DPS.1d2 Select an appropriate statement that describes the relationship between variables S.ID.6		
H.DPS.1d3 Make or select an appropriate statement(s) about findings S.IC.6		
H.DPS.1d4 Apply the results of the data to a real-world situation S.IC.6		

Overview of CCCs: Data Analysis II

(9-12) High School Learning Targets	
<p>H.DPS-1 Design and conduct statistical studies:</p> <ul style="list-style-type: none"> Use appropriate statistical measures for analysis; Develop the concepts of statistical inference and statistical significance, especially in relation to probability principles and sampling distributions. 	
<p>H.DPS-2 Use the rules of probability to interpret data, develop explanations, and address real-world problems</p>	
Develop and Use Probability Models	Draw Inferences About a Distribution
HS	
<p>H.DSP.2b1 Identify and describe the degree to which something is rated “good” or “bad”/desirable or undesirable based on numerical information S.MD.7</p>	
<p>H.DPS.2c1 Determine the theoretical probability of multistage probability experiments S.MD.3</p>	
<p>H.DPS.2c2 Collect data from multistage probability experiments S.MD.3</p>	
<p>H.DPS.1c3 Determine what inferences can be made from statistics S.IC.1</p>	
<p>H.DPS.2c3 Compare actual results of multistage experiment with theoretical probabilities S.MD.3</p>	
<p>H.DSP.2d1 Select or make an appropriate statement based on a two-way frequency table S.CP.4</p>	
<p>H.DSP.2e1 Select or make an appropriate statement based on real-world examples of conditional probability S.CP.5</p>	

View by Instructional Families and CCSS Domains

Instructional Families: Data Analysis I

CCSS Domain: Counting and Cardinality; Measurement and Data	CCSS Domain: Measurement and Data; Statistics and Probability	CCSS Domain: Measurement and Data; Statistics and Probability; Interpreting Categorical and Quantitative Data; Making Inferences and Justifying Conclusions
Formulate Questions/Plan Research	Represent and Interpret Data	Draw Conclusions from Data Collection
K.DPS.1a1 Select a question that is answered by collected data K.CC.5	1.DPS.1a4 Analyze data by sorting into 2 categories; answer questions about the total number of data points and how many in each category 1.MD.4	1.DPS.1e1 Compare the values of the 2 categories of data in terms of more or less 1.MD.4
1.DPS.1a2 Select questions that ask about “How many” and represent up to three categories that can be concretely represented 1.MD.4	1.DPS.1c1 Using a picture graph, represent each object/person counted on the graph (1:1 correspondence) for 2 or more categories 1.MD.4	2.DPS.1e2 Compare the information shown in a bar graph or picture graph with up to 4 categories. Solve simple comparisons of how many more or how many less 2.MD.10
1.DPS.1a3 Identify 2 categories resulting from a selected question 1.MD.4	1.DPS.1d1 Interpret a picture graph to answer questions about how many in each category 1.MD.4	3.DPS.1k1 Apply results of data to a real-world situation <i>No CCSS linked</i>
2.DPS.1a5 Select a question about 3 attributes that can be concretely represented 1.MD.4	2.DPS.1a7 Analyze data by sorting into categories established by each question 2.MD.10	4.DPS.1k2 Apply results of data to a real-world situation 3.MD.4
2.DPS.1a6 Identify up to 3 categories resulting from a selected question 1.MD.4	2.DPS.1a8 Interpret the number of points in each category <i>No CCSS linked</i>	5.DPS.1e1 Use measures of central tendency to interpret data including overall patterns in the data 6.SP.3
3.DPS.1f1 Develop questions, make a plan for data collection <i>No CCSS linked</i>	2.DPS.1c2 Organize data by representing categorical data on a pictorial graph or bar graph 2.MD.10	6.DPS.1d5 Explain or identify what the mean represents in a set of data 6.SP.3
4.DPS.1f2 Develop questions, make a plan for data collection <i>No CCSS linked</i>	2.DPS.1c3 Organize data by representing continuous data on a line plot 2.MD.9	6.DPS.1d6 Explain or identify what the mode represents in a set of data 6.SP.2

CCSS Domain: Counting and Cardinality; Measurement and Data	CCSS Domain: Measurement and Data; Statistics and Probability	CCSS Domain: Measurement and Data; Statistics and Probability; Interpreting Categorical and Quantitative Data; Making Inferences and Justifying Conclusions
Formulate Questions/Plan Research	Represent and Interpret Data	Draw Conclusions from Data Collection
6.DPS.1a2 Identify statistical questions and make a plan for data collection <i>6.SP.1</i>	2.DPS.1d2 Identify the value of each category represented on picture graph and bar graph or each point on a line plot <i>2.MD.9</i> <i>2.MD.10</i>	6.DPS.1d7 Explain or identify what the median represents in a set of data <i>6.SP.5</i>
7.DPS.1b1 Determine sample size to answer a given question <i>7.SP.1</i>	3.DPS.1g1 Collect data, organize into picture or bar graph <i>3.MD.3</i>	6.DPS.1e2 Use measures of central tendency to interpret data including overall patterns in the data <i>6.SP.5</i>
8.DPS.1f1 Formulate a research question to study <i>No CCSS linked</i>	3.DPS.1g2 Organize measurement data into a line plot <i>3.MD.4</i>	7.DPS.1j1 Make or select a statement to compare the distribution of 2 data sets <i>7.SP.3</i>
8.DPS.1f2 Identify two variables to study in a given a research question <i>No CCSS linked</i>	3.DPS.1i1 Select the appropriate statement that describes the data representations based on a given graph (picture, bar, line plots) <i>3.MD.3</i>	7.DPS.1k1 Analyze graphs to determine or select appropriate comparative inferences about two samples or populations <i>7.SP.4</i>
H.DPS.1a1 Design study using categorical and continuous data, including creating a question, identifying a sample, and making a plan for data collection <i>S.ID.4</i> <i>S.ID.5</i>	4.DPS.1g3 Collect data, organize in graph (e.g., picture graph, line plot, bar graph) <i>3.MD.3</i>	8.DPS.1j2 Make or select an appropriate statements based upon two unequal data sets using measure of central tendency and shape <i>7.SP.4</i>
	4.DPS.1i1 (repeated) Select the appropriate statement that describes the data representations based on a given graph (picture, bar, line plots) <i>3.MD.3</i>	8.DPS.1k2 Analyze displays of bivariate data to develop or select appropriate claims about those data <i>8.SP.4</i>
	4.DPS.1j1 Select an appropriate statement that describes the most frequent or the least frequent data point using a line plot, picture graph, or bar graph <i>4.G.1</i>	H.DPS.1c2 Compare means, median, and range of 2 sets of data <i>S.ID.2</i>

CCSS Domain: Counting and Cardinality; Measurement and Data	CCSS Domain: Measurement and Data; Statistics and Probability	CCSS Domain: Measurement and Data; Statistics and Probability; Interpreting Categorical and Quantitative Data; Making Inferences and Justifying Conclusions
Formulate Questions/Plan Research	Represent and Interpret Data	Draw Conclusions from Data Collection
	5.DPS.1c1 Collect and graph data: bar graph, line plots, picture graph (e.g., average height among 3 classrooms, # of boys and girls) 3.MD.3 5.MD.2	H.DPS.1d2 Select an appropriate statement that describes the relationship between variables S.ID.6
	5.DPS.1d1 Select an appropriate statement about the range of the data for a given graph (bar graph, line plot) (i.e., range of data) up to 10 points 6.SP.3	H.DPS.1d3 Make or select an appropriate statement(s) about findings S.IC.6
	6.DPS.1c2 Collect and graph data: bar graph, line plots, dot plots, histograms 6.SP.4	H.DPS.1d4 Apply the results of the data to a real-world situation S.IC.6
	6.DPS.1d2 Solve for mean of a given data set 6.SP.3	
	6.DPS.1d3 Select statement that matches mean, mode, and spread of data for 1 measure of central tendency for a given data set 6.SP.5	
	6.DPS.1d4 Find the range of a given data set 6.SP.2	
	7.DPS.1g1 Graph continuous data using line graphs, histograms, or dot plots 6.SP.4	
	7.DPS.1i1 Solve for the median of a given data set 6.SP.5C	
	7.DPS.1i2 Identify the range (high/low), median (middle), mean, or mode of a given data set 7.SP.4	

CCSS Domain: Counting and Cardinality; Measurement and Data	CCSS Domain: Measurement and Data; Statistics and Probability	CCSS Domain: Measurement and Data; Statistics and Probability; Interpreting Categorical and Quantitative Data; Making Inferences and Justifying Conclusions
Formulate Questions/Plan Research	Represent and Interpret Data	Draw Conclusions from Data Collection
	<p>8.DPS.1f3 Construct a two-way table summarizing data on two categorical variables collected from the same subjects; identify possible association between the two variables <i>8.SP.4</i></p> <p>8.DPS.1g2 Graph data using line graphs, histograms, or box plots <i>8.SP.1</i></p> <p>8.DPS.1h1 Graph bivariate data using scatter plots and identify possible associations between the variables <i>8.SP.1</i></p> <p>8.DPS.1i3 Using box plots and scatter plots, identify data points that appear to be outliers <i>8.SP.1</i></p> <p>8.DPS.1i4 Identify outliers, range, mean, median, and mode <i>6.SP.5c</i></p> <p>H.DPS.1b1 Complete a graph given the data, using dot plots, histograms, or box plots <i>S.ID.1</i></p> <p>H.DPS.1c1 Use descriptive stats; range, median, mode, mean, outliers/gaps to describe the data set <i>S.ID.4</i> <i>S.ID.5</i></p> <p>H.DPS.1d1 Represent data on a scatter plot to describe and predict <i>S.ID.6</i></p>	

Instructional Families: Data Analysis II

CCSS Domain: Statistics and Probability; Using Probability to Make Decisions	CCSS Domain: Statistics and Probability; Using Probability to Make Decisions; Conditional Probability and the Rules of Probability
Develop and Use Probability Models	Draw Inferences about a Distribution
7.DPS.2a1 Conduct simple probability experiments <i>No CCSS linked</i>	7.DPS.2d5 Compare actual results of simple experiment with theoretical probabilities <i>7.SP.7</i>
7.DPS.2d1 Describe the probability of events as being certain or impossible, likely, less likely or equally likely <i>7.SP.5</i>	7.DPS.2e3 Compare actual results of multistage experiment with theoretical probabilities <i>7.SP.8</i>
7.DPS.2d2 State the theoretical probability of events occurring in terms of ratios (words, percentages, decimals) <i>7.SP.5</i>	8.DPS.2e6 Compare actual results of multistage experiment with theoretical probabilities <i>7.SP.8</i>
7.DPS.2b1 Identify sample space for a single event (coin, spinner, die) <i>No CCSS linked</i>	8.DPS.2g1 Distinguish between a linear and non-linear association when analyzing bivariate data on a scatter plot <i>8.SP.2</i>
7.DPS.2d3 Using a tree diagram, represent all possible outcomes of a situation, with up to 3 compound events with 2 or 3 possibilities per category (selecting the color of shirt, pant, type of shoes) <i>7.SP.6</i>	H.DPS.1c3 Determine what inferences can be made from statistics <i>S.IC.1</i>
7.DPS.2d4 Make a prediction regarding the probability of an event occurring; conduct simple probability experiments <i>7.SP.6</i>	H.DPS.2c3 Compare actual results of multistage experiment with theoretical probabilities <i>S.MD.3</i>
7.DPS.2e1 Determine the theoretical probability of multistage probability experiments (2 coins, 2 dice) <i>7.SP.8</i>	H.DSP.2d1 Select or make an appropriate statement based on a two-way frequency table <i>S.CP.4</i>
7.DPS.2e2 Collect data from multistage probability experiments (2 coins, 2 dice) <i>7.SP.8</i>	H.DSP.2e1 Select or make an appropriate statement based on real-world examples of conditional probability <i>S.CP.5</i>
8.DPS.2e4 Determine the theoretical probability of multistage probability experiments (2 coins, 2 dice) <i>7.SP.8</i>	

CCSS Domain: Statistics and Probability; Using Probability to Make Decisions	CCSS Domain: Statistics and Probability; Using Probability to Make Decisions; Conditional Probability and the Rules of Probability
Develop and Use Probability Models	Draw Inferences about a Distribution
8.DPS.2e5 Collect data from multistage probability experiments (2 coins, 2 dice) <i>7.SP.8</i>	
H.DSP.2b1 Identify and describe the degree to which something is rated “good” or “bad”/desirable or undesirable based on numerical information <i>S.MD.7</i>	
H.DPS.2c1 Determine the theoretical probability of multistage probability experiments <i>S.MD.3</i>	
H.DPS.2c2 Collect data from multistage probability experiments <i>S.MD.3</i>	