Mini-Map for M.EE.7.SP.3

Subject: Mathematics
Statistics and Probability (SP)
Grade: 7

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.7.SP.3 Compare two sets of data within a single data display such as a picture graph, line plot, or bar graph.	**M.7.SP.3** Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability.

Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Arrange objects in a specific order or by following a specific rule (e.g., arranging three pencils by increasing length). Group like items by attributes and distinguish between like items based on simple characteristics, such as shape, size, texture, and numerical pattern.	Recognize the structure of bar graphs, picture graphs, and line plots such as the title and labels for the *x*- and *y*-axes. Understand that bars are used to display data on bar graphs, where the height of the bar represents the data values. Understand that pictures or symbols are used to display data on picture graphs, where the number of pictures or symbols represents the data values. Understand that on a line plot, "x" is used to	Recognize symmetric distribution, outliers, and peaks in a data distribution shown graphically. Recognize data values substantially larger or smaller than the other values as outliers. Recognize peaks as data values that most frequently occur. Recognize symmetric distribution as distributions where the left- and right-hand sides of the distributions are roughly equal.	Compare variability of two data sets (i.e., spread out or grouped together) by overlapping the shapes of two data distributions. Compare differences in shapes of two or more sets of data (i.e., peaks, outliers, or symmetric distribution).	Draw inferences by comparing the shape and spread of two data sets (e.g., compare the peaks of two sets of data, height of soccer players and height of basketball players, to communicate that basketball players are, in general, taller than soccer players).

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
	represent the data values.	Recognize whether a set of scores is spread-out or grouped together (variability).		

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target?

In order to compare data, students begin by learning to recognize what is the same and different between familiar items; color, shape, quantity (1-4), size, texture, and pattern. Educators should take care to use attribute words while defining and demonstrating their meaning. While students do not need to say these words, they do need to learn the meanings. Students will also begin to group two or more items in the same set based on an attribute (e.g., two tigers, bumpy balls and bumpy gravel, red spoons). As the students group two or more items, the educator will demonstrate the representation in a bar graph or line plot and encourage students to actively participate in its creation.

How is the Distal Precursor related to the Target?

Students actively participate in the creation of graphs and line plots by placing representations, x's, or dots for each response to the research question.

Instructional Resources

Released Testlets
See the Guide to Practice Activities and Released Testlets.
Using Untested (UN) Nodes
See the document Using Mini-Maps to Plan Instruction.

[Link to Text-Only Map]

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