## M.EE.S-ID.3

**Grade-Level Standard**

M.S-ID.3  
Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers)

**DLM Essential Element**

M.EE.S-ID.3  
Interpret general trends on a graph or chart

**Linkage Levels**

### Initial Precursor
- Order objects
- Classify

### Distal Precursor
- Recognize the structure of a bar graph
- Recognize the structure of a picture graph
- Recognize the structure of a line plot (dot plot)
- Recognize the structure of a pie chart

### Proximal Precursor
- Recognize symmetric distribution
- Recognize outliers
- Recognize peaks in data distribution
- Recognize variability in a date set

### Target
- Analyze overall shape of the data distribution
- Draw inferences by interpreting general trends on a graph or chart

### Successor
- Draw inferences by comparing two data sets

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<table>
<thead>
<tr>
<th>How is the Initial Precursor related to the Target?</th>
<th>How is the Distal Precursor related to the Target?</th>
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<tbody>
<tr>
<td><strong>Initial Precursor:</strong> In order to construct a graph, students begin by learning to recognize what is the same and different between familiar items, such as color, shape, quantity, size, texture, and pattern. Educators should take care to use words that describe (e.g., more, less, red circle, same, different) 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 CDs, bumpy balls and bumpy gravel, red rectangles). As the students group two or more items, the educator will demonstrate the representation in graphs and charts and encourage students to actively participate in their creation.</td>
<td><strong>Distal Precursor:</strong> Students actively participate in the creation of bar graphs, picture graphs, line graphs, and pie charts by placing representations for each response to the research question.</td>
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</tbody>
</table>

A diagram showing the relationship of nodes in the mini-map appears below.

*Key to map codes in upper right corner of node boxes:*

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>IP</td>
<td>Initial Precursor</td>
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<tr>
<td>DP</td>
<td>Distal Precursor</td>
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<tr>
<td>PP</td>
<td>Proximal Precursor</td>
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<td>Supporting</td>
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M.EE.S-ID.3 Interpret general trends on a graph or chart.