### M.EE.S-ID.1-2

<table>
<thead>
<tr>
<th>Grade-Level Standard</th>
<th>DLM Essential Element</th>
<th>Linkage Levels</th>
</tr>
</thead>
</table>
| **M.S-ID.1** Represent data with plots on the real number line (dot plots, histograms, and box plots); **M.S-ID.2** Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets | **M.EE.S-ID.1-2** Given data, construct a simple graph (line, pie, bar, or picture) and interpret the data | **Initial Precursor**  
- Classify  
- Order Objects  
**Distal Precursor**  
- Recognize the structure of a bar graph  
- Recognize the structure of a picture graph  
- Recognize the structure of a line graph  
- Recognize the structure of a pie chart  
**Proximal Precursor**  
- Use bar graphs to read the data  
- Use picture graphs to read the data  
- Use line graphs to read the data  
- Use pie charts to read the data  
**Target**  
- Use graphs to read beyond the data  
- Represent data using bar graph  
- Represent data using picture graph  
- Represent data using line graph  
- Represent data using pie charts  
**Successor**  
- Use graphs to read beyond the data |

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How is the Initial Precursor related to the Target?

**Initial Precursor:** 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.

How is the Distal Precursor related to the Target?

**Distal Precursor:** 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.

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>
</tr>
</thead>
<tbody>
<tr>
<td>IP</td>
<td>Initial Precursor</td>
</tr>
<tr>
<td>SP</td>
<td>Supporting</td>
</tr>
<tr>
<td>DP</td>
<td>Distal Precursor</td>
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<tr>
<td>S</td>
<td>Successor</td>
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<tr>
<td>PP</td>
<td>Proximal Precursor</td>
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<tr>
<td>UN</td>
<td>Untested</td>
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<tr>
<td>T</td>
<td>Target</td>
</tr>
</tbody>
</table>
M.EE.S-ID.1-2 Given data, construct a simple graph (line, pie, bar, or picture) and interpret the data.