| | Change Variable | Time Boundary | Change Representation | Explanation of a Graph |
|---|---|--|---|--|
| | (y-axis) | (x-axis) | | |
| 4 | Identifies one or more significant, specific quantitative (e.g. population) or qualitative (e.g. happiness) components that change over time in the system Identifies and descriptively labels an appropriate comparative change scale (e.g. glad, happy, ecstatic) | Identifies start and end time boundaries within which the variable changes and includes a boundary for projected change based on current trends Identifies content- appropriate time units (e.g. hours, years, chapters) Represents time units in a learner-appropriate manner (e.g. pictures) | Represents continuous pattern of change/trend of a variable over time using a line on a graph in one or more of the following ways: Visibly distinguishes on the line graph the projected pattern of change/trend from that which has occurred Uses referenced, separate lines on a graph to represent related trends | Explains a variable's continuous pattern of change/trend over a specified period of time and does one or more of the following: Explains a projected behavior based on current trends Explains the differences between changes in qualitative (e.g. happiness) vs. quantitative (e.g. population) variables that change over time Explains the difference between changes in accumulations over time and the rates at which they change |
| 3 | Identifies a significant, specific quantitative (e.g. population) or qualitative (e.g. happiness) component that changes over time in the system Identifies an appropriate comparative change scale (e.g. low, medium, high) | Identifies the time boundary within which the variable's change starts and ends Identifies content- appropriate time units (e.g. hours, years, chapters, etc.) | Represents continuous pattern of change/trend of a variable over time using a line on a graph | Explains a variable's continuous pattern of change/trend over a specified period of time |
| 2 | Identifies a general rather than specific component that changes over time in the system (e.g. feelings rather than happiness) Identifies an unclear comparative change scale that also may have labels representing multiple variables (e.g. sad, angry, happy) | Identifies a boundary that is too short or too long Identifies time units that do not match the time during which the variable has changed | Represents continuous pattern of change/trend of a variable over time as event-based using dots connected by a line on a graph | Explains a variable's pattern of change/trend as a series of individual events that are connected in time |
| 1 | Identifies a component that is an individual event rather than one that changes over time (e.g. changes clothes) Identifies a comparative change scale that does not encompass change of the component | Does not include a time boundary Does not include any units on the graph | Represents continuous pattern of change of a variable over time as event-based using unconnected dots on a graph | Explains a variable's change as a series of individual events that are not connected in time and/or that are not related to the variable |

Rubric for a Behavior-over-time Graph