## **Sequencing in Silence**

## **Inductive Reasoning**

Inductive reasoning is widely used in scientific research, everyday decision-making, and problem-solving. It allows for the development of new knowledge and understanding by building on specific observations and evidence. Sequencing in Silence is using inductive reasoning to understand a story or events sequence, and in the process of building comprehension.

## The Process

- **1. Silence** for approximately six minutes. The process takes approximately four to six minutes and will require us to work as a silent team using verbal gestures for communication. It is important for all participants be knowledgeable of the story or non-fiction selection or event being used. If they are not familiar with the information they can observe.
- **2. Draw** an action. The students are asked to draw an action from the fiction or non-fiction selection or event. The students are then asked to draw on a blank paper (also referred to as a panel):

Draw an event from the story you think no one else will draw (very important phrasing).

They are given 1-3 minutes to complete the drawing in silence. Everyone stops at the same time. The phrasing of *draw an action from the story you think no one else will draw* stimulates students to revisit the story in quest of an action they think others might not use (comprehension).

- **3. Demonstrate** sequencing the action panels. The teacher with two students, each with a panel, will silently model the use of gestures and other methods of silent communication to create a sequential order of the panels. The teacher only talks out loud to introduce what the modeling will be. It is helpful to focus the students on observing a technique (e.g. gestures) you will be using. The students then either stay in order of their sequence or place the sequenced panels on a flat surface (floor or table). Modeling both together is best.
- **4. Sequence in Silence** in small groups (3-4 the first times, then can increase the groups size as the process is developed). The students are quickly divided into several groups and directed to a location for sequencing their panels. Floor space is excellent as it provides excellent viewing for collaboration by all participants in the group. It is recommended to have all the panels in one line, even if some are similar. While some panels might have a similar action, the students will be able to reason why one panel proceeds another. Inductive reasoning is excellent for inferences as well. The purpose of silence during this segment is to assist having everyone focused on the different panels instead of voice gridlock.



Sequencing in Silence video



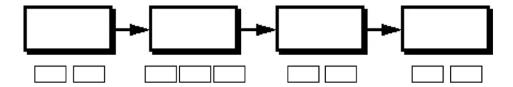
Sharing panels in small groups video

## 5. **Gallery Walk**

The whole class will gather around one of the small groups sequenced panels in a fishbowl manner. Each panel is explained by the person who drew the action in order from the beginning to the end. For the first panel ask who drew it and request them to describe the action. Point to the next panel and ask who drew it and request them to describe that action. Point to the next panel and wait for the person to speak up. Let the students take ownership forward.

After the first group is finished, go to the next group and repeat the process (essentially a gallery walk). The goal is having the students, PreK + K-12, take the responsibility in the process. After the initial uses of Sequencing in Silence, the students will lead the process.

- **6. Questions** about the sequence. The group is asked are there any changes they would like to make with the order of the sequence. If there is discussion about the positioning of panels, excellent. This creates a deeper understanding of what is being studied with Sequencing in Silence. If there are similar actions depicted in panels, they can discuss what is in each panel to determine the correct sequence.
- **7. Adding** to the sequence. When the order of the initial panels have been decided upon, the students are then asked if they would like to add any missing actions. They are drawn on new panels and added to the sequence. This would be modeled in one small group, and completed in all groups after the gallery walk of all groups is complete.
- **8. Extension 1: Sub-panels** below each action panel. The students will dictate or write 2 or 3 things about each action panel. They will then sequence the group of sub-panels under each panel. After completing the sub-panels, the student(s) now have a sequence of events for the fiction or non-fiction selection or occurrence.



**9. Extension 2: Cause and Effect** of a specific panel. Take any individual panel and create causes of that action on the left side and effects on the right side. To facilitate the process, the panel can be taped or pasted to a much larger paper, then writing to the left of the panel the causes of that action, and to the right the effects of that action.