The 3 Essential Elements of SI

1. Wait-Time

Description: The time that elapses between a facilitator/instructor asking a question and the next behavior (student response or the facilitator/instructor talking again).

What Does It Look Like?

Wait-time 1: A facilitator/instructor asks a question of a group or individual. They wait for a response without saying anything themselves.

Wait-time 2: After someone responds to the initial question, the facilitator/instructor continues to wait for others to contribute their own ideas or opinions, regardless of the accuracy of the first response.

What if no one responds?

Repeat the question
Rephrase the question
Simplify the question
Break down the question into component parts
Make the question more specific
Ask the students what it is about the question they don’t understand

Rationale: Through research, the conventional wisdom has become that the quality and quantity of students’ verbal responses increases if facilitators/instructors regularly utilize increased wait-time. 15-20 seconds is ideal but impacts can be achieved even by increasing wait-time from a few seconds to more than 5 seconds.
2. Redirecting Questions

**Description:** This can be considered the process most central to the SI program, and can be extremely effective in classroom instruction as well. It is fairly simple to understand but takes practice to be effective. The goal is to encourage more and better student-to-student interactions.

**What Does It Look Like?**
A student asks the facilitator/instructor a question. The natural tendency for most people is to answer a question when asked. However, this “essential element” requires one to suppress that tendency and redirect questions back to the individual or the group. There are a myriad number of ways to do this.

**Examples:**
- *Would someone else put what they have for this problem on the board?*
- *What is your own opinion on that question?*
- *Show me what you’ve done so far and where you are getting stuck.*
- *Can you think of another way to do this?*
- *Let’s look that up in the text.*
- *Does anyone else know the answer to that question?*
- *Have you asked your teammates what they think?*

**Rationale:** This technique is partly based on the idea that we all learn better when we have to explain something to someone else. It is also intended to guide students to become more independent and self-directed in their thinking and learning, and discourage them from over-dependence on perceived “experts.” Students have other means to find answers to their questions and they should be encouraged to use those means.
3. Checking for Understanding

**Description:** The most common method of checking for understanding is to ask students a closed-ended question like, “Do you understand? Does that make sense?” This can be answered with a simple yes or no and is not effective because students may be uncomfortable admitting they do not understand (or they may incorrectly believe they do understand). It’s necessary to probe deeper to be sure that understanding has taken place.

**What Does It Look Like?**
It is essential that students can explain the topic in their own words. This will provide clues as to their degree of understanding. Maintain eye contact with students as they attempt to do this, so you can check for confusion.

**Examples:**
* Ask a student to summarize the concept just discussed. Ask the group to help, if needed.
* Ask a volunteer to write the main points of discussion on the board.
* Ask a carefully crafted question that will require the student to understand in order to answer correctly.
* Ask for real-life examples or applications of the concept.
* Ask for a similar analogy.
* Ask a student to solve a similar problem.

**Rationale:** When we find ourselves in a learning context, we cannot always assume that students are gaining understanding, no matter how things may appear. We must check for understanding by asking the students to demonstrate it along the way.