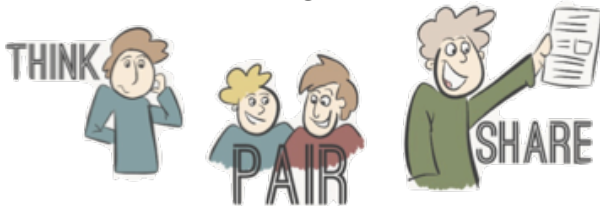


CHECKING FOR UNDERSTANDING

Definition: These are **simple**, **non-graded**, **in-class** activities designed to give you and your students useful feedback on the teaching-learning process. Checking for understanding offers an opportunity to uncover misunderstandings together so gaps in learning can be addressed before leaving class.

Think Pair Share

Give students independent time to think about a question or prompt. Then compare ideas and identify best answers with a partner. Finally, have pairs share their thinking with the class.



Fist to Five

Take the pulse of the class by asking students to give you a “fist to five” about how well they understand a concept. Five fingers symbolizes complete understanding; zero fingers means they don’t understand at all.



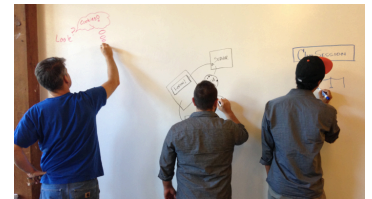
Stand Up If You Agree

Ask students to stand up if they agree with a statement or reverse the procedure and have students stand up if they disagree. This gets students out of their seats and allows you to see how confidently they know the answer to your prompt.



Explain in Your Own Words

Ask students to explain something in their own words, drawings, charts, etc. on the whiteboard walls. Allow time for students to walk around and view each other’s explanations.



1-2 Pairs

“Raise two fingers if you understand the material well. Raise one finger if you understand this material okay.” Now pair sets of 1’s and 2’s for either pair programming or for 2’s to explain the information to 1’s.



Most Important & Most Confusing

Ask students to describe the most important thing they learned and identify any areas of confusion in one minute. They can submit responses through a Google Form or Hipchat – or write them down.



Implementation: Implement checks for understanding in class *frequently* and with *flexibility* to remediate if necessary. Ensure that you’re paying attention to student responses and discussions to assess whole-class and individual understanding.

CHECKING FOR UNDERSTANDING

(PT 2)

Mind Warm Up

Ask teams of students to work together to find the mistakes planted in code written on the board without using computers. Allow time for all groups to find the mistakes. The team that finds the mistakes first explains their answers to the class.

```
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
2 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
3
4 <html xmlns="http://www.w3.org/1997
5 <html>
6 <meta http-equiv="Content-
7 type" content=
8 "text/html; charset=us-
9 ascii" />
10 <script type="text/
11 javascript">
12 function redo() {top.
13 location.reload();}
14 if (navigator.appName ==
15 'Netscape') {top.onresize = redo;}
16 </script>
17 </head>
18 <body>
19 </body>
20 </html>
```

Questions in a Hat

Put simple recall questions in a hat and pass around for students to pull out a question and answer it. Or have students come to the front of the room and answer in front of the class.



Dodgeball Talking Stick

Keep a ball in the room to call on students when asking questions. You throw, they catch, and then they answer the question. If they don't know the answer or another student wants to add on, they can throw the ball to that student.



Give Me Five

Ask a discussion question and tell the class you want at least five answers from five *different* students. Provide wait time between answers. Use this as an opportunity to hear from students who haven't participated yet.



Prior Knowledge Inventory

Write 1-3 simple questions at the start of class when introducing a new topic. Question students about previous related knowledge and use this information to determine the best starting point for your lecture.



Memory Matrix

Ask students to categorize new terms or information by placing in the correct place in a pre-created matrix. Example:

	Paradigm	Type system	Use-case
Ruby	Object Oriented	Dynamic	Back-end
JavaScript	Object Oriented	Dynamic	Front-end
Haskell	Functional	Static	Back-end

'Catch Phrase' Vocab Review

Give students printed pieces of paper with relevant vocabulary and ask students to play "catch phrase" with each other, explaining the vocabulary without using the words on the cards.



Focused Listing

Chooses a single important concept from a particular lesson and ask students to list several ideas that are closely related to that focus point.
Ex: Write up to 10 words that define...
Ex: List 4 important characteristics of...



Remember to Watch Body Language: If you pay careful attention to your students, quite often they will communicate understanding or lack of understanding through their facial expressions, eye contact, and body language.