

## Checking student understanding

### What is the pedagogical practice of checking understanding?

The pedagogical practice of checking understanding is a fundamental step in the process of teaching and learning. Previous knowledge brought by the students into the classroom influences the way to understand the subjects to teach and classes or learning opportunities that teachers provide. Unless the understanding is checked, it would be hard to know what the students are getting from the class. In fact, checking understanding is part of formative assessment in which teachers identify learning objectives, deliver feedback to students and plan lessons based on their mistakes or misconceptions. It is important to know how those strategies are used to improve the students' performance within a larger system. The question "Did you understand?" and the comment "Ok?" do not reach any of these objectives and it is unlikely for them to spawn an honest answer from every student.

Checking understanding provides students with positive study habits. When teachers are constantly checking understanding, students become more aware about how to monitor their own understanding. In the renowned work from Bloom and Broder (1950), poor performing students were gathered with students with good results. Academically successful students shared with the other how they checked their own learning. For example, these students explained that they paraphrased sections of content with their own words, they asked themselves about it and thought about examples related to the information they were reading. After observing their partners, students who lag behind began to incorporate these strategies in their own study habits. Results from this research were consistent when changes on the behavior were compared to the control group, whose participants spent the same amount of time studying the content but did not get help from their partners about ways to check their understanding.

Checking understanding not only allows checking for errors and misconceptions, but also could increment learning. In a research carried out by Vosniadou, Loannides, Dimitrakopoulou and Papademetriou (2001), two groups of students took part in a physics class. With one group, researchers checked understanding before moving into the next part of the class. They did this showing the students a brief scenery and asking them to predict and explain the result. The other group took part in the same class, but with no pause to check understanding. As expected, the first group showed a substantially better content understanding than the second one, within the starting and final evaluation. Also, another study suggests that short and frequent quizzes increase information retention and recovery among the students, even when this information is

not formally assessed, and helps students to organize the information in a better way (Roediger, Punam & Smith, 2011).

## What is not checking understanding

Checking understanding is not about the final exams or standardized tests. Even though there is evidence that checking understanding works better in students' performance in this kind of evaluations, we are not talking about them when we say "checking understanding". Final exams and standardized tests are summative assessment. They are designed to deliver feedback regarding the students' performance after the teaching process has occurred. Checking understanding is a systematic approach to assessment.

## Strategies

- Create the test: Write 10 high cognitive level questions related to the content. Afterwards, choose two of these and answer them in two sheets.
- Key information: To describe the author's purpose.
- Opinion table: To make a list with opinions about the content in the left side of a "T" table and justify them in the right side.
- "So what?": to identify the main idea of each class answering in a notebook mentioning why is important, like a journal
- To self assess one's understanding from 1 to 5: Using fingers. Raise hands for the teacher to have an overview of the class.
- To use a device (for example, a clicker cell phone app DirectPoll o PollEverywhere) to answer a survey or get added words.
- Explanation: To explain the main idea using an analogy.
- Evaluation: To answer the questions "What is the author's main idea?" and "What are the arguments for and against this position?"
- Define: Choose a word or phrase that the author presents and answer what it means.
- Question starter: Regarding the class topic, fulfill the following sentences:  
"I think that \_\_\_\_\_ because \_\_\_\_\_." and "The idea \_\_\_\_\_ confuses me."
- Curiosities journal: To make a list with the most interesting, controversial or relevant ideas of the reading. To include page number and a paragraph of 100 words explaining the choice.
- Advertisement: to elaborate an advertisement with images or texts for the learned concept.

- 5 words: Choose 3 words to describe a concept. Afterwards, explain and support every choice up.
- Confusion moment: to answer what things from the text produce confusion and frustrate, and back the reasons up.
- Collage: to elaborate a collage about class topics and explain them in one paragraph.
- Past, present and future chart: to elaborate a three-column chart describing which things were previously known, what was learned now and what is still left to be understood from the lesson topics.
- Post-its: to use post-its- to describe important or confusing fragments.
- 3-2-1: to write down 3 learned things, 1 interesting thing and 1 unsolved question.
- 1 minute diary: In 1 minute, describe the most meaningful thing learned during the day.
- Double-entry notebook: to elaborate a chart with two columns. Use the left column to write one quote from the book or notebook annotations and use the right column to write a reaction to that quote.
- Comic: to use a comic creator tool such as *Bitstrips* to represent the learning
- Tag a topic, answering: Which are the key words associated with the concept? Explain and discuss.
- Podcast: to act as if students were an expert on the topic and discuss the content in a podcast, using tools such as *Easypodcast*.
- Twitter: to define a concept in maximum 140 characters.
- Mail arrived: Each student writes a question about a topic on the front side of an envelope and puts the answer inside. Then, questions are “mailed” within the classroom. Each student writes his/her own answer, checks if it is correct with the “official” answer and puts it inside the envelope. After some “mailing” and sometime of group discussion, envelopes are put into the teacher’s mail box.
- Traffic light: From each student seat, a color palette is raised if help is needed, a green one if the student is progressing well and yellow if is a little bit confused.
- Stream of consciousness: To write freely about what is confusing in a topic.
- Way-out ticket: To make students carry out a short task, like answering a delimited question, and once it is finished they will have a way-out ticket.
- Checking wrong ideas: To expose a common wrong idea and make students explain why they agree or disagree with it.
- Goal checking: To write on the board the class objectives and ask the students to raise their hand to explain to a classmate what they have learned about the objective.

This document has been elaborated by Josefina Santa Cruz and framed in the project “Observatorio de Prácticas Pedagógicas”, based on the next references:

<http://www.ascd.org/publications/books/115011/chapters/Why-Check-for-Understanding%C2%A2.aspx>

Visited on June 27<sup>th</sup>, 2016.

[edutopia-finley-53-ways-to-check-understanding-2016.pdf](#)

Visited on June 27<sup>th</sup>, 2016.

[https://us.corwin.com/sites/default/files/upm-binaries/53157\\_ch3.pdf](https://us.corwin.com/sites/default/files/upm-binaries/53157_ch3.pdf)

Chapter of a book, just the last name is identified: CORWIN

<http://acue.org/> (American Council of Education)

Página con recursos didácticos para profesores universitarios  
Website with didactic resources for university professors.

Visited on June 28<sup>th</sup>, 2016.

Teaching Works. University of Michigan. (2016). High-Leverage Practices. 13 de julio de 2016, de

Teaching Works. University of Michigan. Sitio web: <http://www.teachingworks.org/>

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