

# Making thinking visible

## Opening windows into student learning and understanding

Learning can become more effective when students are able to visualise their thinking. This can include setting goals, writing down the steps when solving a problem, or making annotations. Teachers benefit from seeing students' goals, concepts, and progress. Instead of basing lessons on assumptions about student understanding, strategies for making thinking visible can be used to provide both teachers and students with a more accurate picture of students' learning needs.

Making student thinking visible can support their learning processes by making studying more effective and teaching more targeted. Activities that raise student and teacher awareness of the main focus of a course, the student's understanding of the subject, and how to improve are all important. The core of such activities is making student assumptions and ideas visible for both teachers and students. This information can be used by teachers to adapt their teaching and provide feedback, and by students to make more informed decisions about their study.

Digital media such as Twitter, YouTube, Facebook, blogs, wikis, Google Docs, WeChat, and Padlet invite

interaction and collaboration. These media offer ways of providing feedback during the process of creation, which makes it easier for students to ask follow-up questions. They may also discuss, or even challenge, the teacher's feedback.

During live sessions, the chat panel on video conferences, shared documents and text messaging can all be used to make student thinking visible. Teachers can follow up on responses, discussing and contrasting the content they have introduced with the ideas of the students. This helps students to relate their assumptions to the ways in which ideas are discussed within a discipline.

## Making thinking visible at a distance

There are many ways to making thinking visible – one approach is described below.

Explain the purpose of the approach.	Making things visible before live sessions means activities can be adapted to meet the needs of students, allowing them to make best use of time with teacher and classmates.
Create purposeful questions or tasks and set a deadline for responses.	Give students questions or assignments before the live session. The questions can be multiple-choice, short-text response or tasks that allow students to express themselves using illustrations, images, sound, or video. Or students can be asked to pose their own questions, either to the teacher or to each other.
Analyse responses.	Collect student answers and then use their responses to plan lessons that cover the areas they find interesting and that also help them understand what they find difficult or have misunderstood.
Present responses to the students and adapt learning activities to take these responses into account.	Sharing responses can make students more aware of what they can do, what they understand, and what they need to work on in the future.
Students present their solutions to the class and reflect on how they could apply or build on them.	Presentation can be via poster, video or live demonstration, with the whole class joining discussion about what should happen next.

## How did it go?

Let us know in the comments on the website [www.open.ac.uk/blogs/innovating](http://www.open.ac.uk/blogs/innovating) how making thinking visible worked for you and your students. Please share any tips that others would find useful, or link to examples of good approaches.