RefreshTeaching Event
"**Keeping your students on board - How interactivity can make for a motivating lecture**"

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Interactivity makes a lecture motivating – or the other way round?

I was mentioned by students of the following class as they found it motivating:

Metallorganic Chemistry and Homogeneous Catalysis
5th Semester
85 Chemistry Students

These notes are based on their feedback.

1. The lecture was perceived as interesting as its **structure** is clear and "connected" to other courses (presence/online was irrelevant). It was embedded in a N**etwork** with a common conceptual toolbox.

2. I made clear that my goal was that **no one is left behind** in understanding.

3. **Differentiated** didactic was offered to implement interactivity:
– Theoretical classes (2h / week) to learn the basic concepts (based on former classes).
– Tutorials (1 h / week): I gave them myself and showed how to apply the concepts.
I asked for the students' ideas and used them to develop the solutions live and online.
According to my students' feedback, the tutorials were the heart of the teaching, because I answered the "why" question exhaustively.

4. **Technical** aspects:
– I use a simple tool for CLEAR written / visual communication (ChemDraw, the common molecule drawing software).
– I prepared the screenplay of the tutorials in advance, then developed the topic online with the students.
– I regularly checked the quality of the recordings and managed the videos myself (they are available on my web page).

5. **I enforced interactivity!**
After implementing all of the above, I strongly required the students to get active.

This experience suggests that students' motivation is relatively independent from the didactic form chosen. Also classically structured courses can appeal to students – provided that they fulfill their needs.

My personal view is that *understanding* (that is, the answer to the "why" question) must be at the heart of a class. Learning notions by heart should be reduced to the unavoidable minimum. Put differently, if you show the logical connections within a topic, the notions are arranged in a structure and can be logically derived from each other, which is beneficial to memorizing. This old truth does not decay in time!