Hybrid Online/In-Person Teaching During Corona Restrictions: Challenges and Solutions from Dept Biology

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A discussion of the changes made to teaching in IBI due to corona restrictions during the last two semesters, what worked and what didn't work with online and hybrid classes, and with adjustments to interactive approaches to teaching, practical classes and field courses.

SEED webinar NTNU 26/11/20

The Technology...

- Hybrid teaching is easier in the hi-tech rooms (R2, S21, R22, etc.)
- But we need suitable working microphones and speakers in all rooms to keep online students 'in the room' and able to discuss/present
- Panopto works well in dedicated lecture theatres, but teachers need to work around the strictly fixed times & the 3-sec time delay
- Use document cameras or online whiteboards instead of blackboards
- Zoom vs Blackboard Collaborate, etc...?
- Practical issues with in-class students connecting online via laptops...
- Recording classrooms & student presentations privacy issues...?
- Problems with time zones & quality of student internet connections...

Hybrid Classrooms – Online vs In-Person

- All in-person classes (as normal) *or* all online classes (e.g. lectures or smaller seminar groups) seem to work better than hybrid classes...
- More teaching effort needed for online or hybrid classes, especially in the transition (e.g. creating online resources, more 'scaffolding' around tasks)
- A second teacher/assistant to monitor online comments and activity
- Video both ways is useful so everyone feels more connected and less isolated, and also to monitor online attendance and attention!
- Breakout discussion group activity varies more online, and its harder to know when to visit groups and when to leave them alone
- Software for group work online (e.g. MSTeams, Google Docs, etc.?),
 and use of virtual coffee/lunch rooms (e.g. Gather https://gather.town)

Changing Our Teaching Styles & Methods

- Students find online classes more tiring, so shorter lectures or video presentations work best, with more interactive elements
- Longer and more structured group discussions/tasks are also needed online compared with normal in-person classes
- Hybrid classes and online teaching forces us to change or re-think our teaching methods – often a useful exercise in itself...!
- Some tried and trusted in-person teaching styles or methods just don't work as well on-line or for hybrid classes...
- We may need to create quite sophisticated web-based resources to get the best out of online student-centred (e.g. problem-solving) tasks
- BUT... the experience and the student learning benefits of certain practical classes and field courses just cannot be replicated online...

Additional Issues...