Small group activities in online/hybrid situations

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Small groups: what worked

- Three different environments:
  - Inf1B - compulsory first-year programming course, 400 students
  - Inf Connect - optional non-credit first-year course, usually around 30-150 students
  - Informatics Tutoring Network - around 30 student volunteers at all levels

Inf1B: recreating f2f environment online

Weekly tutorials - minimal change to last year

Outcome: hard to get students to engage

- cameras off, often mics off

- hard work to lead the group

- can work well with an engaged group

Inf1B: recreating f2f environment online

Weekly lab sessions - changed from drop-in to synchronous pair programming

Outcome: a bit more engaging

- peer programming mostly popular, though some students disliked it

- problems of non-engagement less, but still there

- challenging when there is a significant disparity in experience

Inf Connect: using Padlet for interaction

Weekly lectures, plus weekly breakout groups of 10-20 students. Padlet was used for brainstorming and sharing ideas.

Outcome: much better engagement
 - was still lead by verbal discussions, so some problems remained
 - much better way of sharing ideas
 - still significant variations in engagements
 - dropped the interactive sessions in semester 2

Inf Tutoring Network: using Miro

Occasional sessions developing the theory of change for tutors and tutees that we hoped the network would achieve

Outcome: engagement levels much higher

- easy to engage in for students who don't want to speak

- non-threatening way for students to comment on each others' contributions

What works best?

- Levels of engagement highest in tutoring network, lowest in Inf1B
- Very different environments - engagement is easily predictable regardless of approach to sessions
- But I feel the good use of appropriate technology and pedagogy can really help small groups online
- I don't think reusing materials developed for f2f in an online situation is good enough
- Not obvious how to use these approaches in different situations - e.g., how to use Miro for programming

2. How will this affect next year?

- Definite preference to do small group work face to face if possible
- But how can interactive tools enhance that, as well as allow students not physically present to join in?
- Students not engaging is not only a problem in online groups.