Completing assessment components

New group 4 guidance:
Our school is closed indefinitely. What do we do about our group 4 experiments? Students are unable to go in to complete them. Can they be missing marked?

IB response:
1. We are unable to missing mark group 4 IA. This is because the missing mark calculation needs candidates to have completed other components in order to compare their performance against the average performance, and in group 4 there is no other component in the May 2020 session.

For biology, chemistry, physics, sports, exercise and health sciences (SEHS), and environmental system and societies (ESS)
2. We suggest that students who are unable to go in to school to complete their group 4 experiments carry out something other than laboratory experiments. The group 4 subject guides and Teacher support material already include some possible alternatives:
   • using a spreadsheet for analysis and modelling
   • extracting data from a database and analysing it graphically
   • producing a hybrid of spreadsheet/database work with a traditional hands-on investigation
   • using a simulation provided it is interactive and open-ended.
   • there are several phone apps which can be used to collect data from simple experiments
3. Teachers know which experiments can be conducted safely in or around the home – for example projectile motion using toys on ramps in Physics or local walks – e.g. litter survey, lichen on trees for biology. However, teachers should be careful about advising students to conduct experiments at home that have health and safety implications, such as ‘kitchen chemistry’. Students can video their work so that the teacher can validate that they did it.

For computer science
Students are advised to plan how they will communicate with clients and advisors throughout the development of the IA. They should devise a strategy that identifies the method(s) they intend to use to communicate with.

For Criterion C, students may need to consider alternative approaches to acquire the skills necessary to create the solution. They may also need to consider whether to develop a less sophisticated solution if they do not feel they will be able to acquire the skills necessary using only online information.

For Design Technology
The following advice to schools will depend on the phase of the design cycle on which students and teachers are working:
Aspect 1: CAD, concept modelling and Technical drawings
Many students may not have CAD software available at home; however, as CAD is not a required element of the design project, students can use a range of other techniques to create concept models and/or technical drawings. These may include sketches, paper and card modelling and the use of materials which are available at home. Technical drawings can be hand drawn and then scanned. Using these techniques will enable students to meet the modelling requirements.

Aspect 2: Creating the prototype(s)
Students are encouraged to manufacture their own prototype; however, this can be outsourced (Guide p111). If it is not possible to create one fully functional prototype, a series of prototypes may be created to demonstrate proof of concept for each aspect of the design specification. No marks are awarded for the quality of the prototype or how it was made.

Aspect 3: Testing the prototype with users
Students may be able to use social media platforms to obtain feedback on particular aspects of the design specification, for example demonstrating aesthetics and function to others. Students may also be able to test performance aspects of a prototype themselves.

4. Teachers are advised to engage with other teachers on the Programme community sites to gain ideas about how to complete group 4 experiments without access to schools.