NE211 Teaching for home learning: secondary science

Virtual experiments checklist

Check	Reason	Notes
Is it intuitive to use?	Some simulations can be challenging to understand what to do, and importantly, why students would use it. Planning to use virtual experiments means having a good grasp of the simulation yourself as a teacher. If you struggle to manipulate the controls, or are unclear as to what is going on, then your students are likely to struggle too.	
What type of data does it produce?	Many simulations produce only “perfect” data which can be misleading.	
Is the work at the right level for your students?	The experiment might be overly simplistic for what you want to students to achieve.	

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Does it calculate the results?	Some simulations do all the calculation work for the students, rather than them having to then produce tables of data, or graphs are done for them. This defeats much of the reason for carrying the activity out.	
Check the names of equipment and scientific language.	The language and presentation can be confusing and unlike what they have seen in the lab. For example, in the USA, a conical flask is called an Erlenmeyer flask, and so you would need to explain this carefully in your instructions.	
Does it require particular software?	Many older experiments require flash or java plug-ins which may not be compatible with all devices. For example, some may only work on a PC platform, not a mobile device running iOS or Android, and this needs to be checked before releasing them to students.	

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