Top tips for teachers on the learning affordances of virtual reality

Consider the educational value of a virtual reality (VR) product for your class by asking:

1. What can students do with this product that is different from other educational resources or tools?
2. Does it offer something that students don’t have access to in real life?
3. How can the product add value to my lessons? Do I want a one-off immersive experience to prompt engagement or experiences that can be revisited or used across key learning areas? Do I want to use it for guided discovery or creative, experimental design – Does the product have the affordances that suit my pedagogical approach?
4. Can my school meet the technical/hardware specifications to deploy the VR product?

Stretch your pedagogical imagination with VR ‘sandbox’ or studio environments.

‘Sandbox’ or studio VR environments provide learners with easy-to-use tools to create, design, prototype, annotate, interact and navigate with. Some VR environments can be networked so that students can virtually collaborate on tasks. Environments such as Minecraft VR or Tilt Brush (a 3D art studio) allow students to build models, simulate places, represent relationships, iterate on design, and exercise creativity. For example, in Minecraft VR students can build models of body organs that are as large as a house, and which allow for guided tours inside and outside the model. Similarly, in history, students can represent an event by researching and creating a 3D map that can be either flown over or toured at ground level. Students studying a play like Romeo and Juliet could create a historically informed map of Verona where the sequence of events in the play are visually symbolised and enhanced with quotes from the play. Tilt Brush can be used for design and prototyping; for example, costume or set design can be created for experiential, formative feedback before the task is undertaken in real life.

Evaluate how developmentally appropriate the VR experience is for your students:

1. Is the content age appropriate?
2. How might students respond to modes of social interaction in a virtual environment with other students (if it is networked) and/or with computer generated characters that might populate the environment?
3. How might students respond to the learning affordances of VR e.g. cognitively, can they comprehend the purpose of manipulating size and scale? If students can freely navigate in the VR environment, could they become disorientated or overly distracted?