

NATURAL SCIENCES_ SENIOR PHASE_ MWAZVITA CHIKOPO_ 09-04-2021

Email: <u>mwazvitac@nect.co.za</u>

USING DIGITAL RESOURCES

There are many digital resources that you can use to help learners develop conceptual understanding in Natural Sciences. These include:

- ✓ videos
- ✓ interactive models
- ✓ quizzes
- ✓ simulations

There is also a variety of methods teachers can use to help the learners to learn; but the focus must be on *learning* not *technology or a digital resource*!

One of the best websites of open-source Science simulations is hosted by the University of Colorado and is called **Phet.** The link to the site is:

https://phet.colorado.edu/

Apart from the fact that these simulations are free to use, they can be downloaded and used on devices. The site also has a section for teachers to share and collaborate on how they use the different simulations. The simulations can used on any device that can access the Internet and can be transferred on WhatsApp too. There are simulations in many Science topics and can be used with young learners and by University students – some are very advanced.

The educational philosophy of the designers is also interesting. They have designed these simulations for learners to learn through play.

<u>NB</u>: For younger learners it is essential that teachers provide support that helps them explore, observe, reflect, ask questions and make conclusions. The questions should be modelled specifically for the needs of the grade, assisting in self-directed learning allowing learners to continue learning in the absence of teachers.









