Transforming OER

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Why are you listening to this lecture?

I believe that you:

• believe in **increasing access** to education

• are passionate about **integrating new technologies and pedagogies** in teaching and learning

• are interested in **open practices**

• insist that **learning should be fun**

• genuinely **care about the future evolution of humanity**
How do we do it?

• Reaching the *unreached and the marginalized* through technology enabled learning

• Catering to the *last rung of the intellectual ladder*

• With *open arms* instead of closed doors

• Cater to *all senses and perceptions*

• *Boldly go* where no one has gone before
What are OER?

While begging the pardon of the purists,

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Why transform?

In the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed.

Charles Darwin

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When to use Virtual Reality?

• Using the real thing is dangerous or impossible, inconvenient, or difficult.

• Give the disabled the opportunity to do experiments, and activities that they cannot do otherwise.

• Travel, cost, logistics of gathering a class for training make an alternative attractive.

• Teaching tasks involving manual dexterity or physical movement.

• Make learning more interesting and fun.

360 VR video

• 360 VR videos are immersive spherical videos, mapped into a 3D geometry where the user can look around during playback using a VR head-mounted display

• easily interacted with affordable headsets such as Google Cardboard in the classroom.

• act as personal fieldtrips. The teacher is able to transport students to a place or set of places that would otherwise be inaccessible to their class.

• learners make better connections with their learning by providing concrete, visual explanations and examples.

• allows the learner to engage with their surroundings.

• through ‘sense of presence’, these interactions have the potential to develop greater empathy and deeper understanding.


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Why Augmented Reality?

So that a learner in a developing country, using printed study materials due to limited access to technology, would have the same enrichment through multimedia and digital resources as a more privileged Western counterpart.

What is the Blockchain?

It is a single linked record of digital events, stored on each participating computer. It has the properties that:

• the entire record is distributed over a wide network of participating computers and so is resilient to loss of infrastructure;

• it is possible to confirm the identity of any addition or modification to the record;

• once a block has been added by consensus among participants, it cannot be removed or altered, even by the original authors;

• the events are publicly-accessible, but not publicly readable without a digital key.

Blockchain in education – why the hype?

• store records of achievement and credit, such as degree certificates.

• the student can access, share with employers, or link from an online CV.

• provides a persistent public record, safeguarded against changes to the institution or loss of its private records.

• direct awarding of certificates and badges by trusted experts and teachers.

• just as MOOCs make teaching widely visible, so the blockchain may expose awarding bodies and their products to public scrutiny.


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Why Instant Messaging (IM)

• For most people in the developing world, a mobile phone is the only network-connected device they encounter daily, and their most widely used application is messaging.

• The top four messaging apps in terms of monthly active users are WhatsApp, Messenger, WeChat and Viber.

• Data show that connected learners tend to prefer mobile devices.

• People in emerging markets tend to use messaging services more.


Image source: https://flic.kr/p/Q73WQF
Key takeaways

• **Move away from tradition.** Think beyond printed textbooks and PDF. You can read only one word at a time in both cases.

• **Think like a learner.** They live with constant sensory overload. Giving them a static textbook is like depriving them of oxygen.

• **Think immersive. Think non-leaner.** If modern learning is ad-hoc, teaching should be too.

• **Don’t pay too much attention to the technicalities.** Just do it and figure it out as you go along.

• Don’t be fooled by big EdTech companies who sell technology at a premium. **Most of this stuff can be done yourself.**

• **TRANSFORM!**
Thank you