



# Transforming OER

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Guest Lecture  
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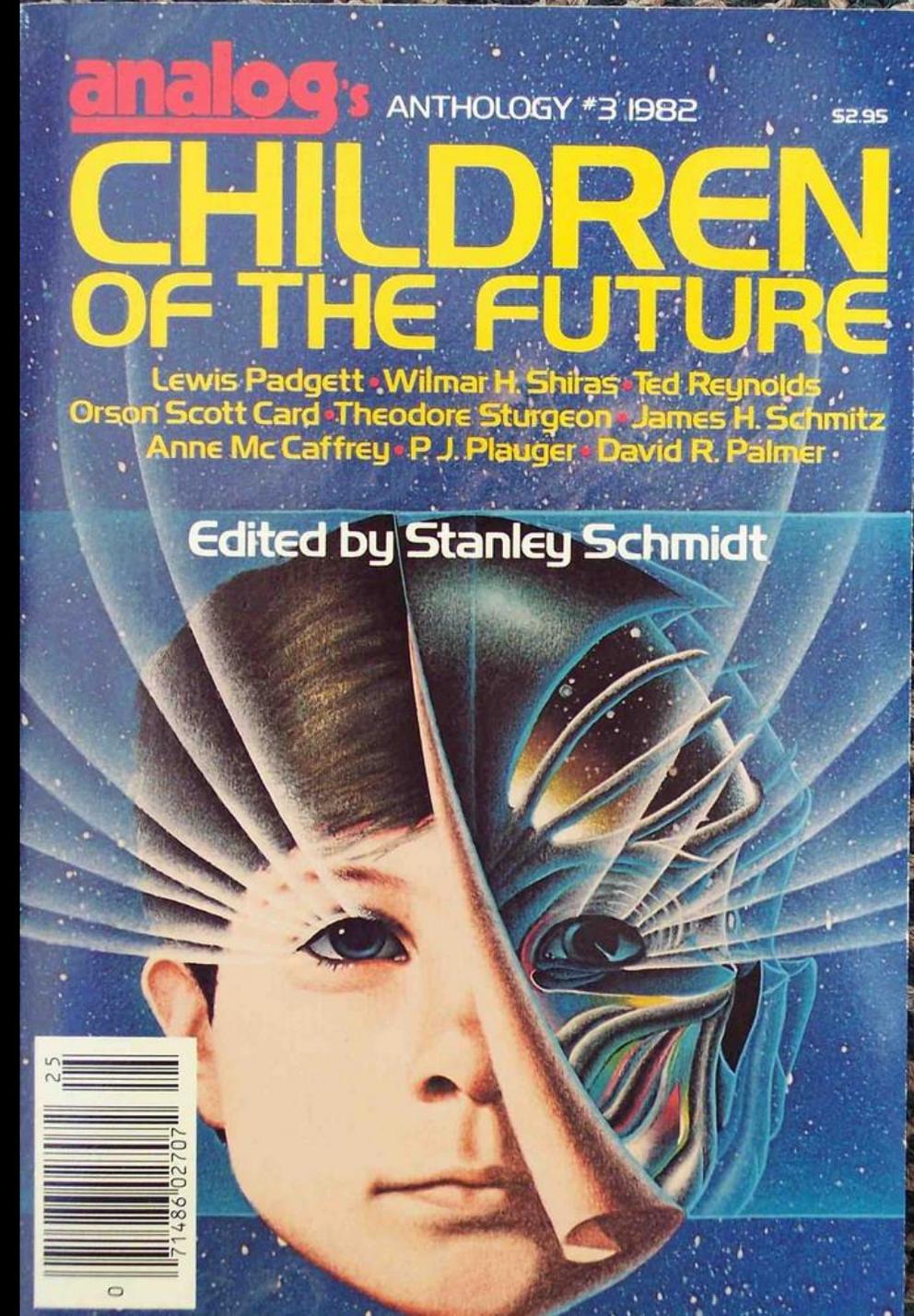
May 3, 2018



# Why are you listening to this lecture?

I believe that you:

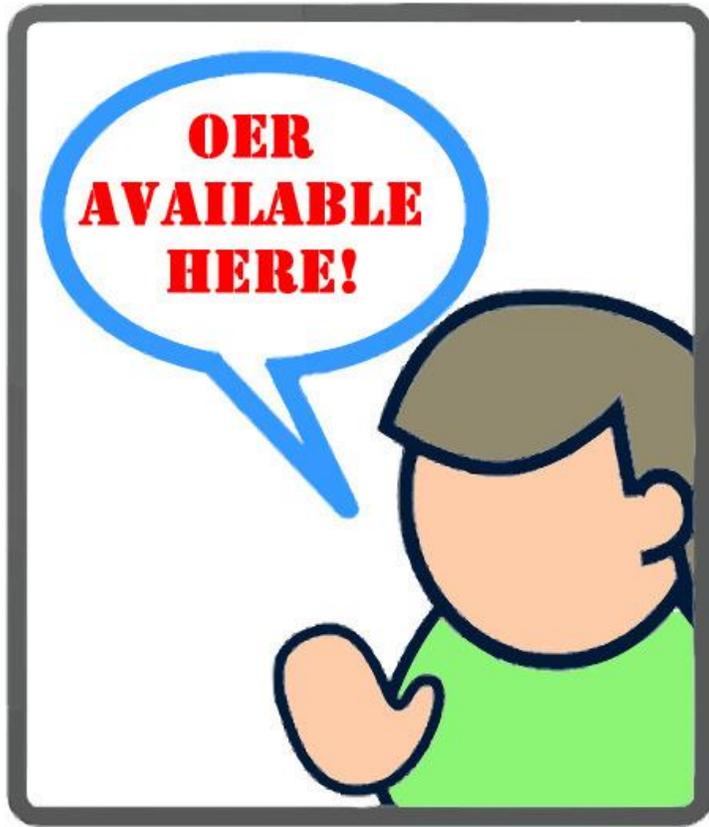
- believe in **increasing access** to education
- are passionate about **integrating new technologies and pedagogies** in teaching and learning
- are interested in **open practices**
- insist that **learning should be fun**
- genuinely **care about the future** evolution of humanity





# 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,

Open Educational Resources (OER) are pieces of content (text, images, videos, audio, presentations etc.) which have a Creative Commons license attached.

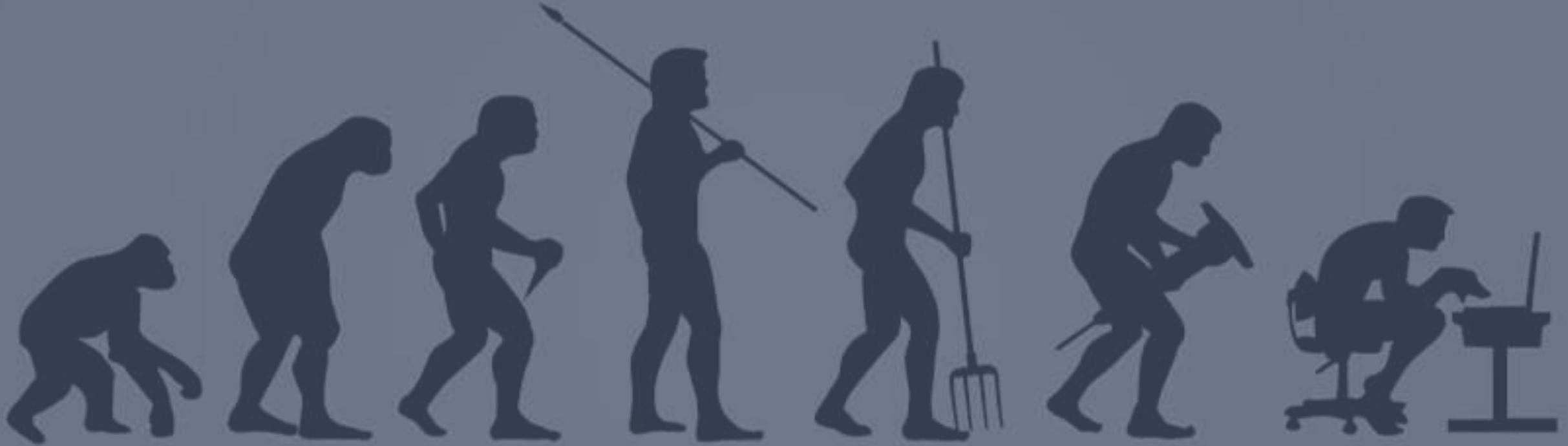
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# Why transform?



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

*Charles Darwin*

# 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**.



# 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.

**COMMONWEALTH of LEARNING**

## Print2Screen

App bridges print and digital culture

This new mobile application integrates multimedia into printed course materials. Using Quick Response Codes (QR codes) or 2D barcodes, the Android app allows learners to view multimedia embedded in a printed course material using a smartphone or mobile device.

Typically, any multi-media references in printed course material are referenced by a hyperlink which must then be manually entered into a web browser. The app eliminates the need to retype a URL, as the reader simply uses a mobile device to scan the code. It also has the ability to keep a library of resources viewed, add notes to a particular resource for future reference and share a resource on social media for social learning.

Download free at Google Play Store

**Information**

**My Library**

**Scan QR Code**

**Discuss on Social Media**

Introductory Biodiversity

6. Conservation of biological diversity in natural habitat is in-situ conservation and outside the habitat are ex-situ conservation methods.
7. To prepare a report with the help of public participation on biodiversity of an area is called people biodiversity register.

**Video Activity: 2**

This video provides a basic introduction to biodiversity, threats to biodiversity and conservation methods. What are the different biodiversity conservation methods?

<https://www.youtube.com/watch?v=MYcocA41zal&index=3&list=PLXN-JCVb8z8A15WLNHNZpkZAE4SY08Znjj>

Video

**Augmented Learning**  
Piloted in Seven COL OER courses

# What is the Blockchain?

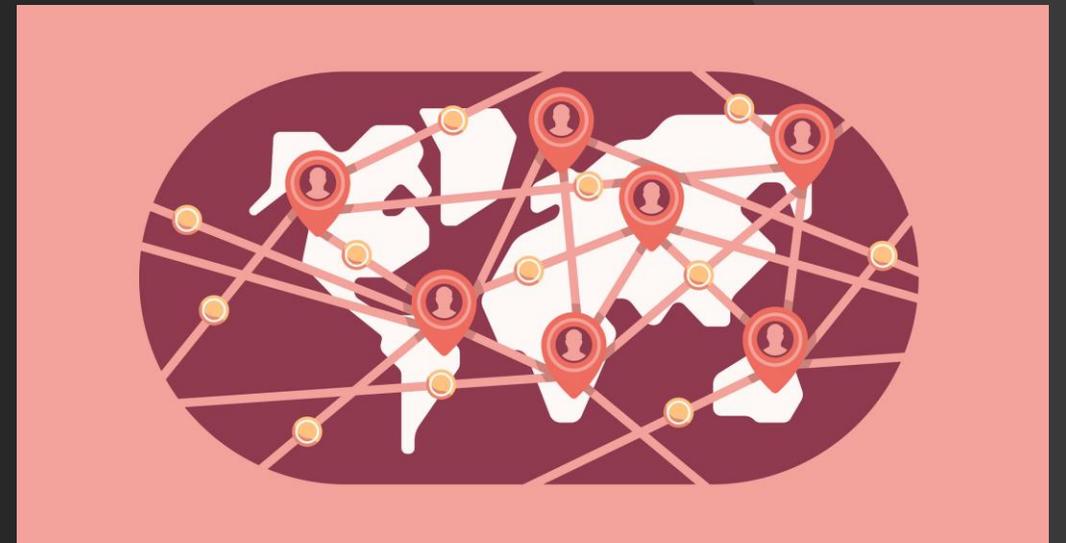
It is a single linked record of digital events, stored on each participating computer. It has the properties that:

- 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.



# 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.





# Key takeaways

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- **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-learner.** 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