

Trends in Learning Design

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Learning with Mobile Devices

- Coronavirus Pandemic - accelerated the “**Blended Learning**” movement
- Teachers and lecturers increasingly employing ‘**Enquiry Learning**’ - Using digital equivalents of libraries, archives, museums, and field trips and their associated learning activities

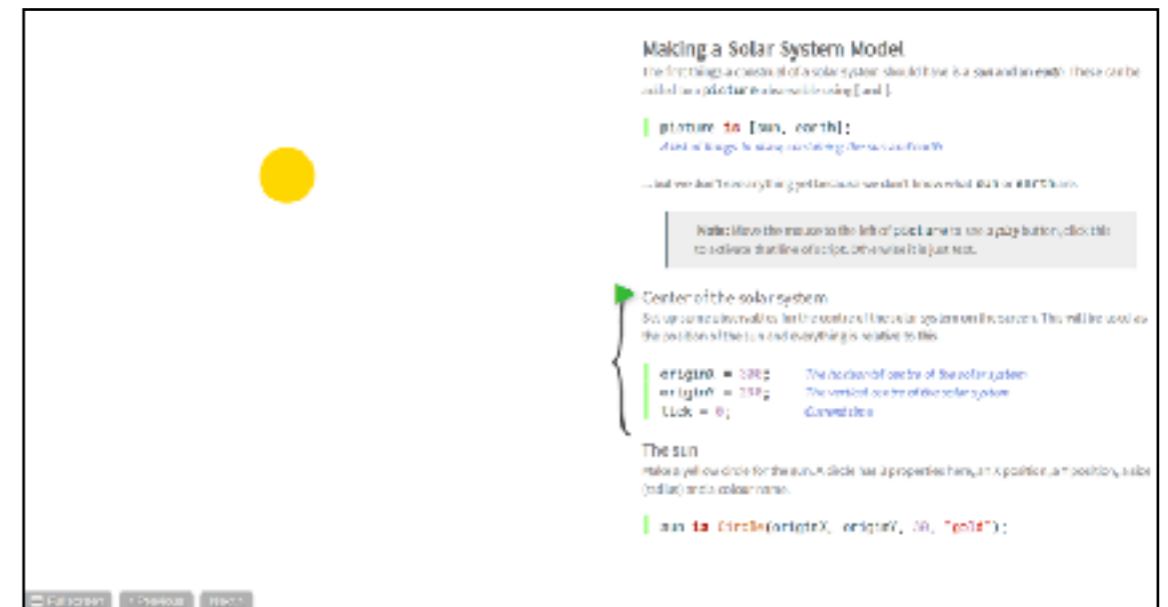
Virtual Dairy Field Trip



<https://www.discoverundeniablydairy.com/virtual-field-trip>

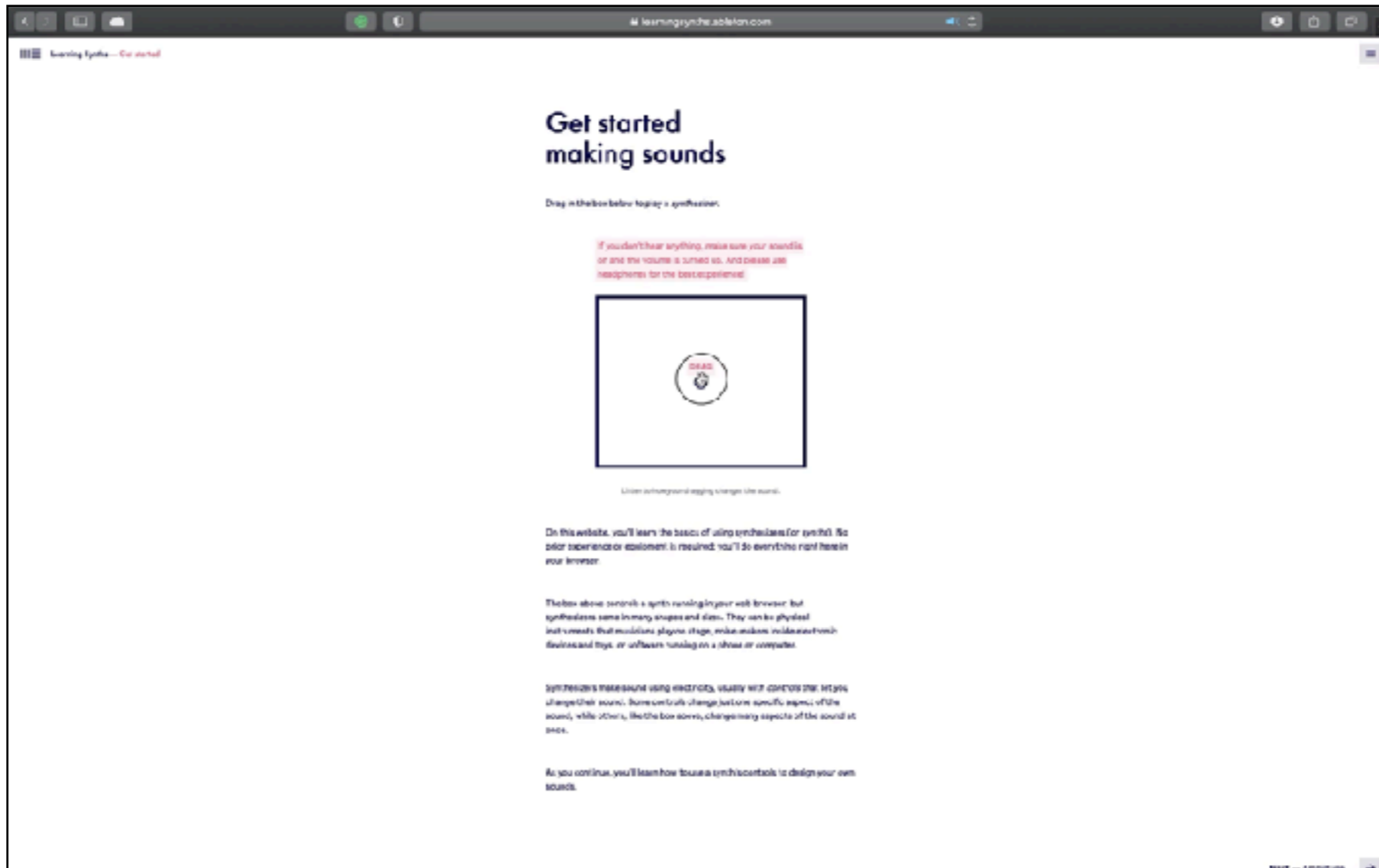
Learning with Mobile Devices

- Adaptive teaching technologies that give intrinsic feedback on student action, **microworlds** and **simulations**
- Students can ‘concrete’ abstract ideas
- Allows younger people to understand the principles of complex systems
- Teachers can set pre-programmed activities or challenges. Can include summative assessments too



”Construit” (above) enables students to practise using code to build a Solar System model

Simulations



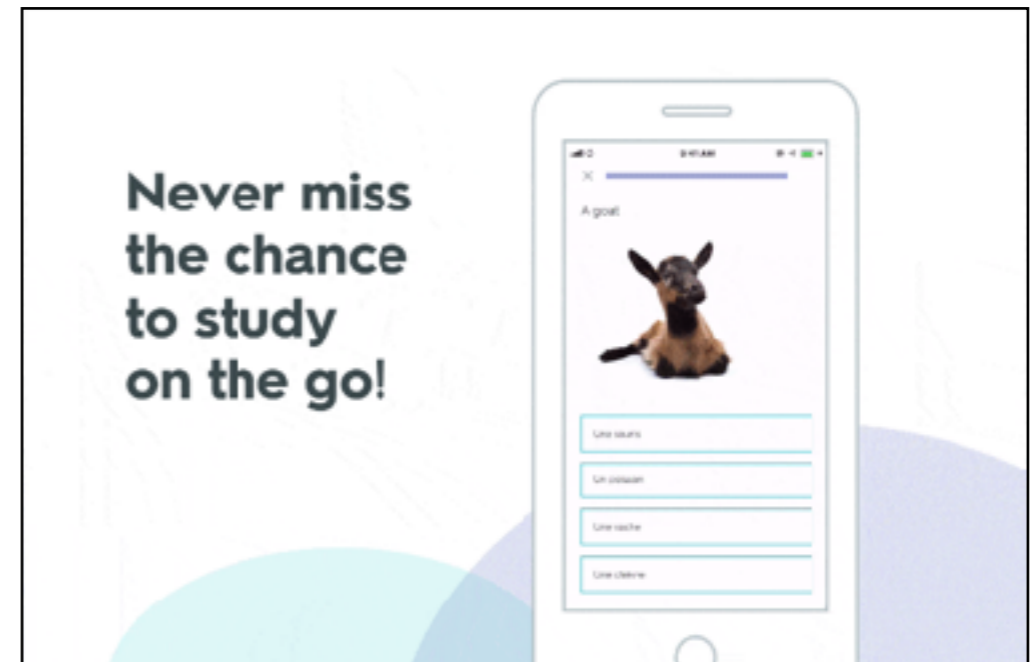
<https://learningsynths.ableton.com/en/get-started>

Learning with Mobile Devices

- **Games and VR/AR** technologies emulate a real end world experience.

They all contain some form of model of a real-world environmental system. They can provide prompt feedback on the learners actions

<https://www.roadtovr.com/apple-ipad-pro-2020-lidar-arkit/>



Learning with Mobile Devices

- **Participation/collaboration** via digital forms of discussion
- **Asynchronous discussion** -
When members take part at any time
- **Synchronous discussion** -
Where they participate during a specific time period, even across timezones
- **Collaborative digital spaces** allow members to go to a specific online place to access messages, can reply or start a new discussion threads

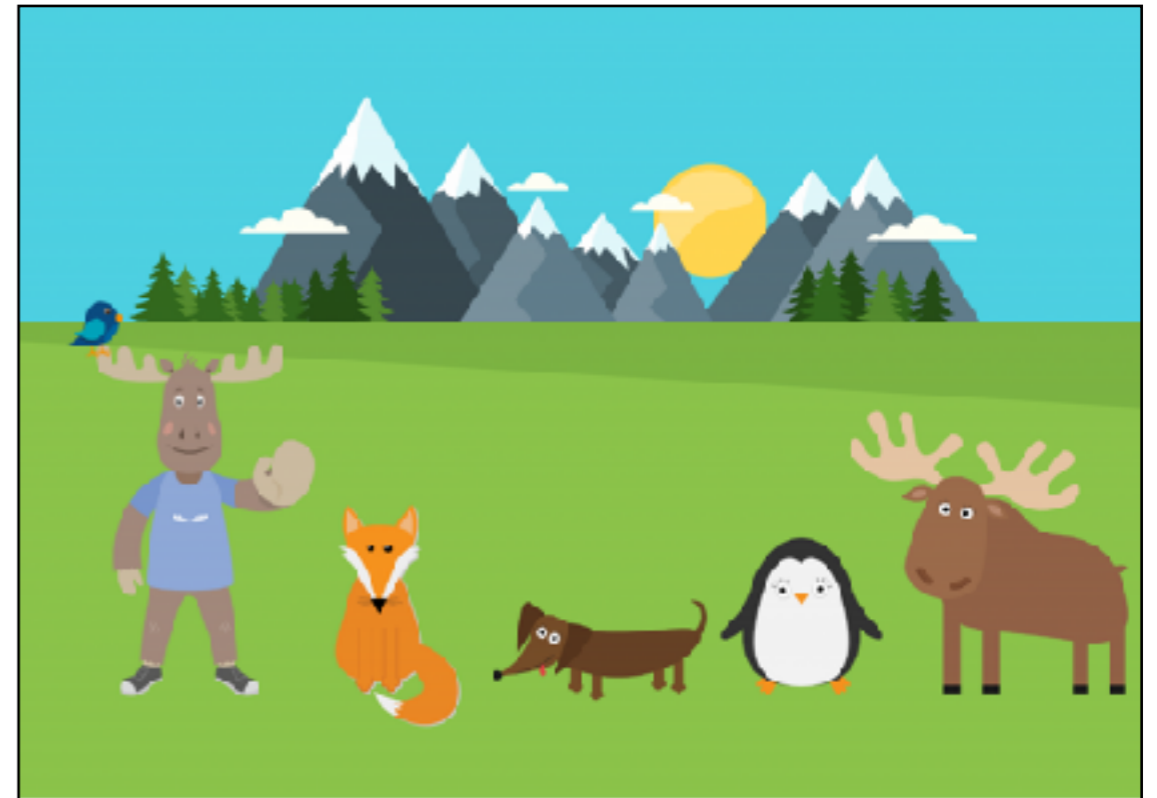


Learning with Mobile Devices

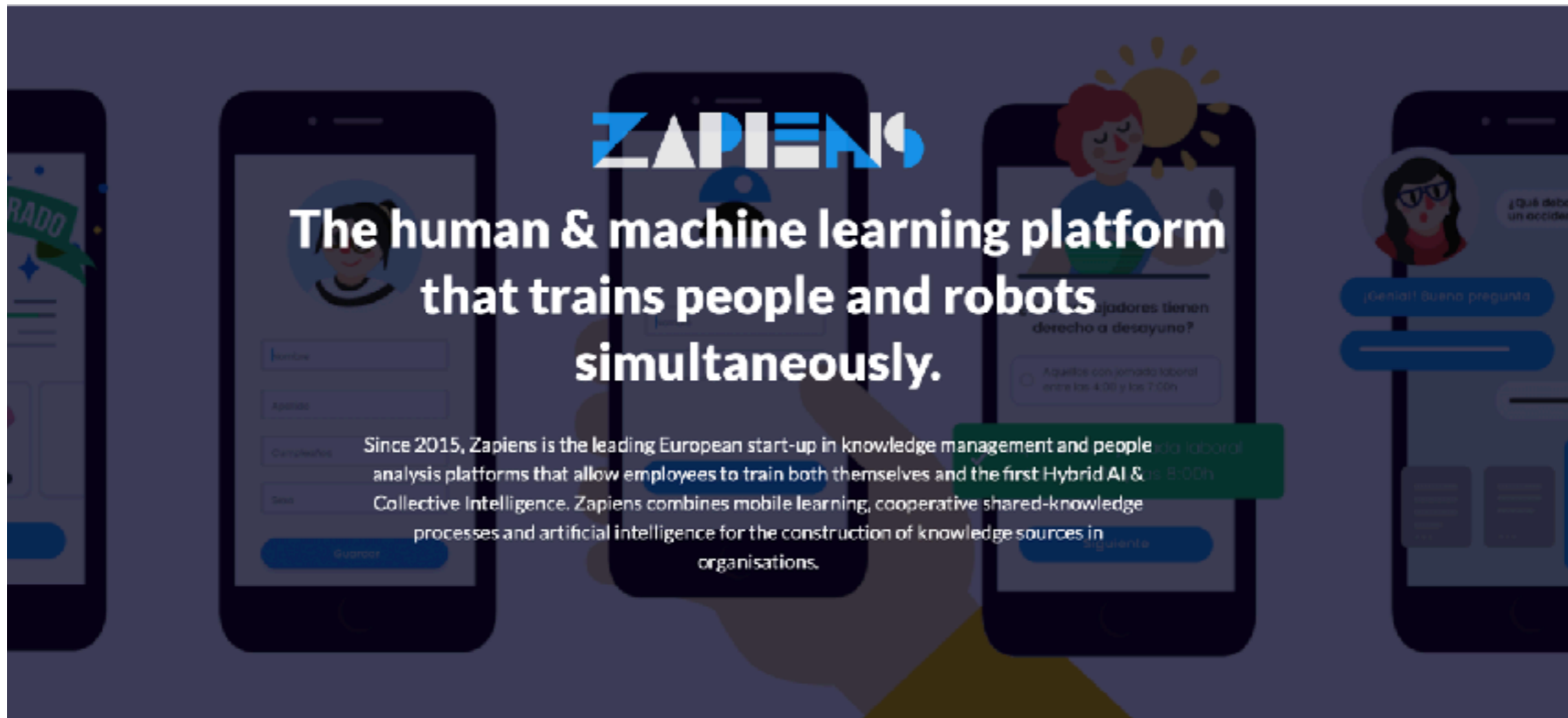
“Mind Moose [mobile app] is a fun, digital platform that teaches children how to keep their minds healthy.”

“**Short animations** introduce topics like brain science, self-awareness and self-esteem, managing emotions, solving problems, and developing resilience. Students earn certificates and badges as they progress.”

<https://www.opencolleges.edu.au>



Datafication in Education



ZAPIENS

The human & machine learning platform that trains people and robots simultaneously.

Since 2015, Zapiens is the leading European start-up in knowledge management and people analysis platforms that allow employees to train both themselves and the first Hybrid AI & Collective Intelligence. Zapiens combines mobile learning, cooperative shared-knowledge processes and artificial intelligence for the construction of knowledge sources in organisations.

The image features a dark blue background with several smartphone screens displaying various educational and training content. The Zapiens logo is prominently displayed at the top center. Below the logo, the main headline is written in white and yellow text. A smaller paragraph of text is positioned below the headline. The background also includes faint illustrations of people and a sun, suggesting a collaborative and learning environment.

Data may be used to predict outcomes, to detect risks, and to “personalise“ the education system around individuals’ needs.

Global Datafication of Education

- UK
Blackboard and Pearson ‘have been the subject of fierce backlash after appearing to use student **data for secondary purposes** without notice or **consent**’
- USA
Cyber security incidents such as **data breaches** such as the hacking of Chegg accounts.
- China
Facial recognition technologies trialled to track attendance and behaviour



Datafication of Education

- “Facial recognition technologies, able to give teachers **real-time feedback on student concentration levels**, was reportedly installed at a high school in Hangzhou”
- “Controversial technology already in use includes ‘intelligent uniforms’ to **monitor student locations** in a number of schools, The Global Times reports.”

"We need to be very careful when it comes to students' personal information," Lei Chaozi, Director of Science and Technology at China's Ministry of Education.

<https://www.bbc.co.uk/news/world-asia-49608459>



The Chinese government says it plans to "curb and regulate" the use of facial

Optional Links For Discussion

- https://www.opencolleges.edu.au/informed/edtech-integration/trends-educational-technology-2020/?__cf_chl_captcha_tk__=c49d1f17881fcc975bbc6e7f371976bc9672ab83-1607275485-0-AclvqVZiwGw9CwF63GYxm9xh0ObcQ_dqgFqvvgguGINS0zNqgtTIFNebQ-IWbc6kKIV5_KRE2tES4ulqz-sk37mmW5nQXa-UNuR7jl-LsEDfIVbAoaqmCLq3f6h4LGK7NjJa-vf3NxKjbAEuFAvofkkOfgkZOluYpvcLNda6EA7EdIUxM0ah7Ibl6nMA17Zh43oBxrgiW1Xy6dp2rTFjWxoQ3acOlflbkcA8NpHxdXO9ctWGJ2OpwaFRwPKT4j3yNkin5paypj9XdQwAsm9LkCl6vpjlzGk491pedRv3E_0e4dzFPD91Fe2zj74Bwg1LF6XwB1J7KILf0LS7IFYsTtTveA1uabCeS4d1njoJYFxEd64nF9JOCWsYG9mNTh-X5_Leam1_AroB-CabqCRRgrqHMP1EWePIsh5SKx0juUnYCq-k8DbEm7gv0bChWG4QZNbv8dCPULa2Eud9KT37_-1NRWEb_Jmc7b-yLNLDIJshZ-084BfTN7jnkhe096T8Kvv82gLHTcHhWm6mRsfk06b5_Dz1MaD-KCfbLpYGohYY1wlHB3FhEx0LFpSoB5_JmhD5nKK6TwccP6f7SJSP2I1wXKTXUULnUbT4op8HlqgHdSSZGsP4oS67QOVyEgu4al2w4pazeV0W5hUDhxt3B7vfBlveLi1738EuCkw8QY6H
- <https://www.bbc.co.uk/news/world-asia-49608459>
- <http://edutechwiki.unige.ch/en/Microworld>