

XR technologies and experience-based learning: A new tech for education?

Ali Taheri & Claudio Aguayo
Auckland University of Technology

A decorative border composed of dark gray triangles pointing to the right, arranged in a repeating pattern around the central text area.

BACKGROUND: CONCEPT-BASED TEACHING

CONCEPT-BASED EDUCATION





SCHOOL

LIFE



EXPLICIT vs. TACIT KNOWLEDGE

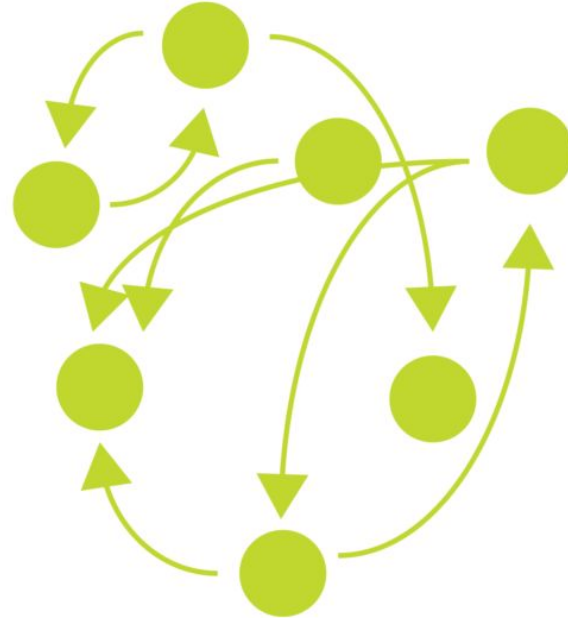




Traditional thinking




Systems thinking




KINDLING.xyz

How Stone Age Humans Made Hand Axes


1. The process started with a large piece of rock.




2. The humans roughly shaped the rock with a stone hammer.




3. Using a hammer made of wood, stone, or antler, they sharpened the edge.



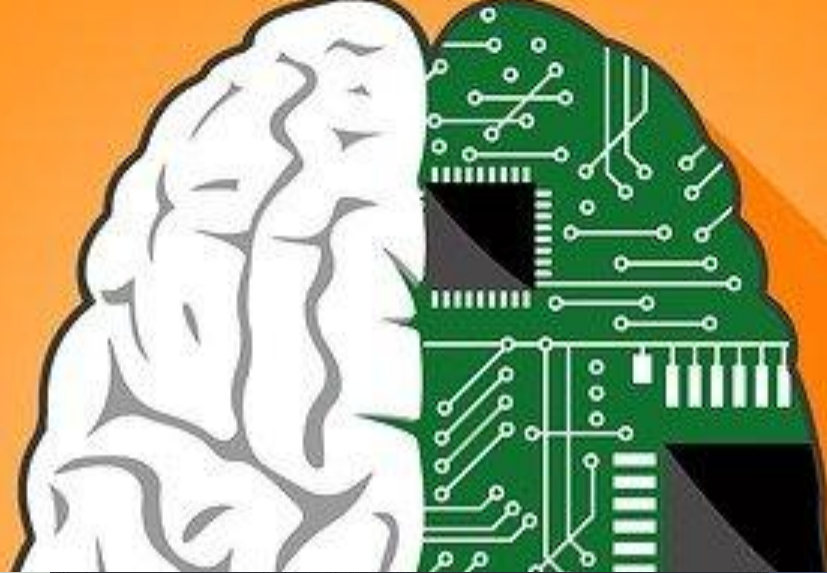
4. They trimmed the edge by prying off tiny flakes with a pointed stick.



finished hand ax





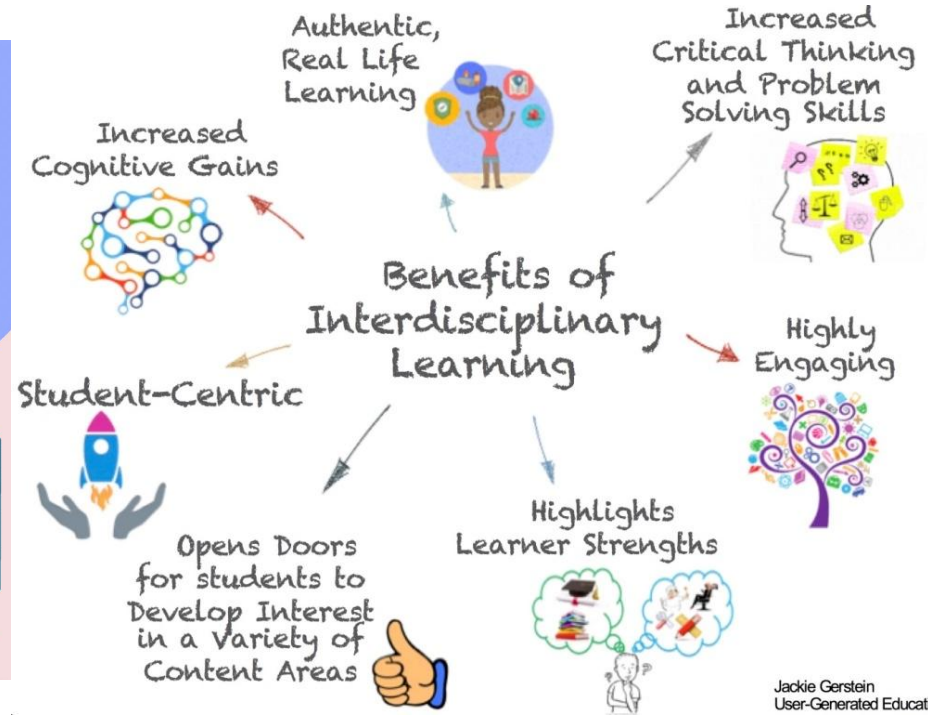


Dependency of students on modern technology?

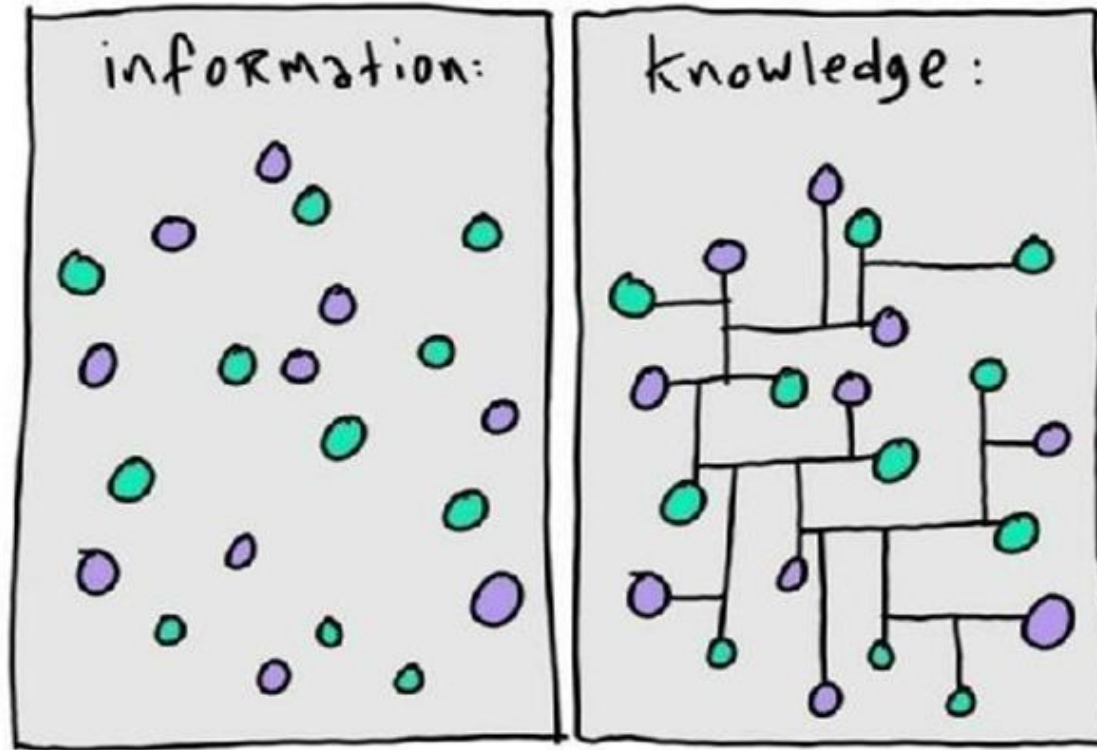




INTEGRATED LEARNING



THE NEED FOR KNOWLEDGE!





NOTES ON BLINDNESS: INTO DARKNESS

A VR JOURNEY INTO A WORLD BEYOND SIGHT



DEATHTOLLS EXPERIENCE

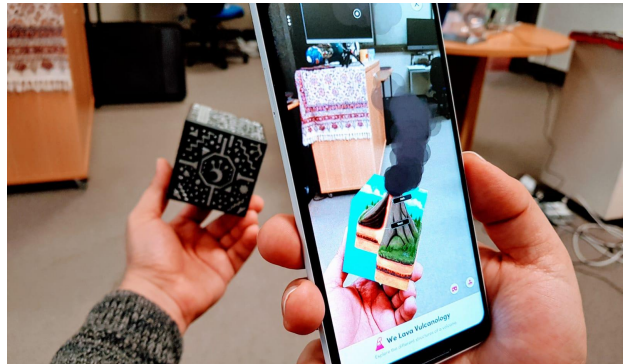
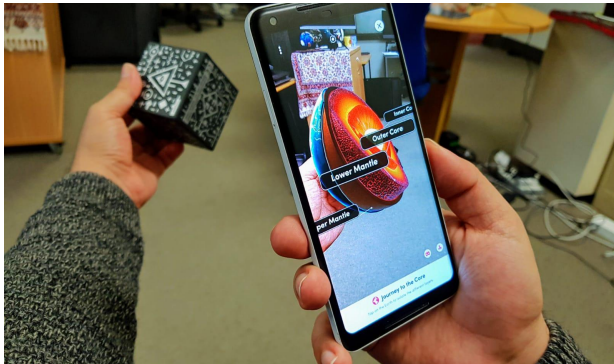
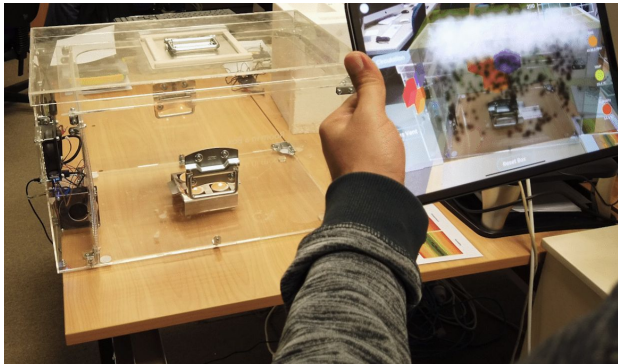
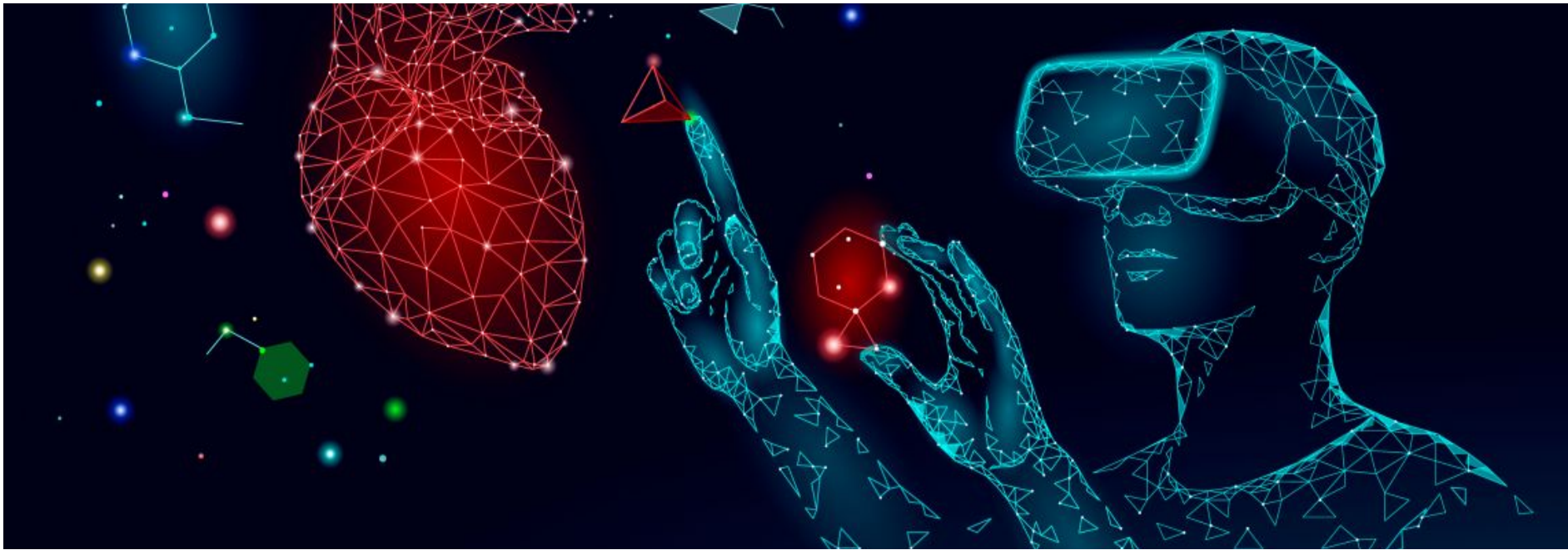


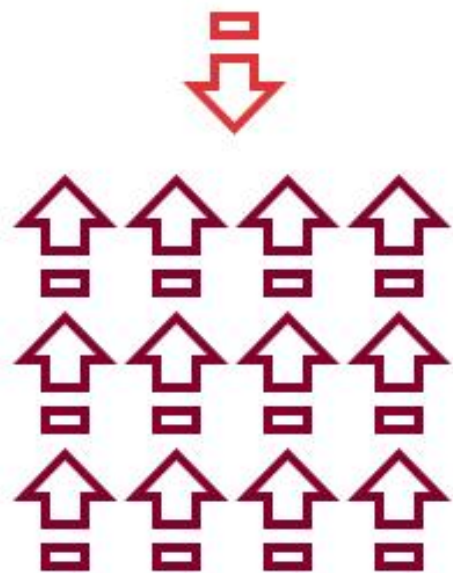




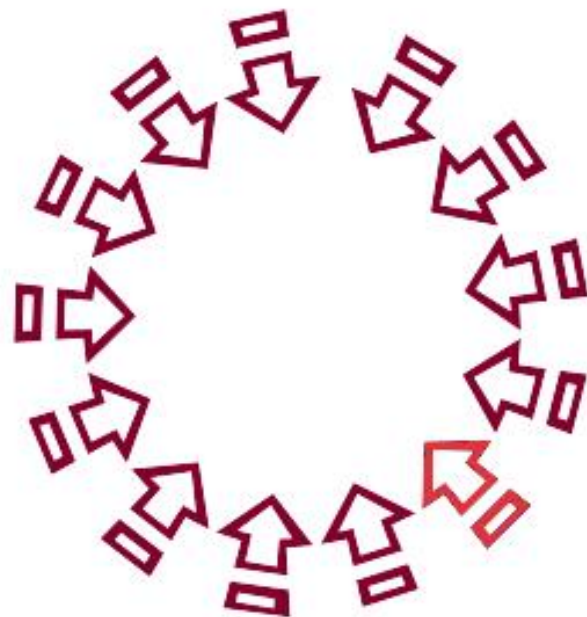


EXPERIENCE-BASED LEARNING WITH XR





PEDAGOGY



ANDRAGOGY

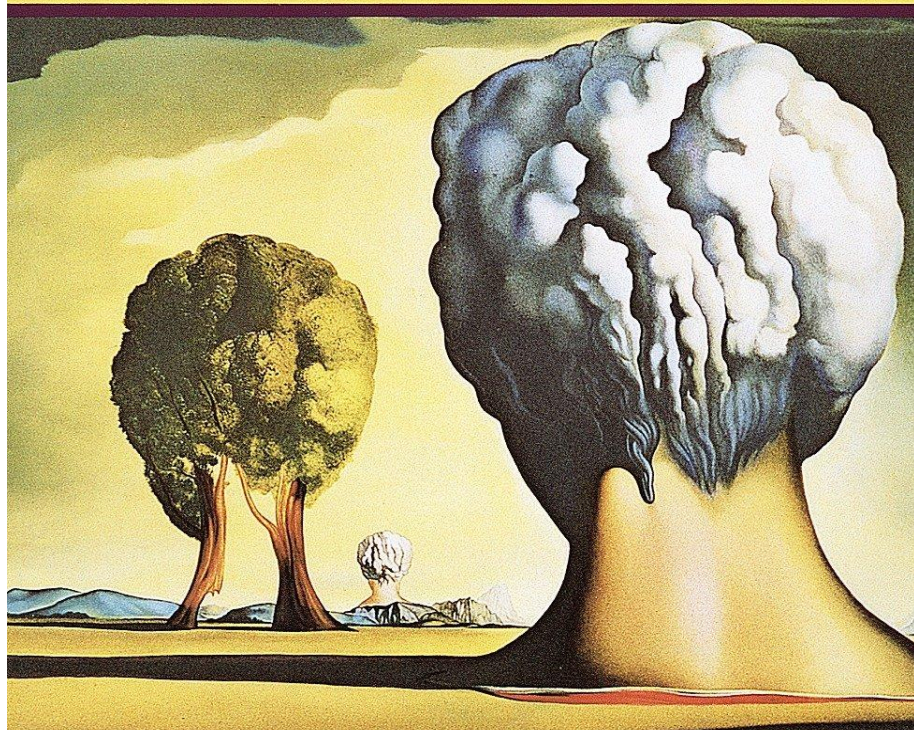
HEUTAGOGY



THE TREE OF KNOWLEDGE

The Biological Roots of Human Understanding

Revised Edition



HUMBERTO R. MATURANA and FRANCISCO J. VARELA

AUTOPOIESIS AND COGNITION

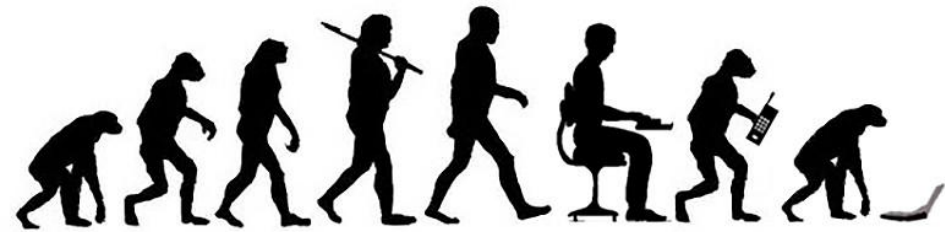
The Realization of the Living

With a preface to 'Autopoiesis'

by

Stafford Beer





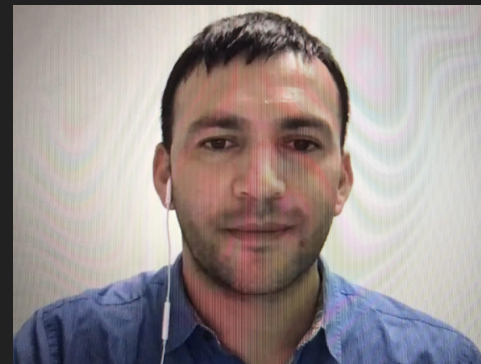


PhD Candidate | Media Developer and
Research Officer, AppLab,
Te Ara Poutama, Faculty of Māori and
Indigenous Development

THANK YOU

Ali Taheri & Claudio Aguayo

ali.taheri@aut.ac.nz | caguayo@aut.ac.nz



Senior Digital Innovation Advisor |
Director R&D AppLab
Te Ara Poutama, Faculty of Māori and
Indigenous Development