



CDU **HIVE**



HEALTH IMMERSIVE VIRTUAL EDUCATION
@ COLLEGE OF HEALTH & HUMAN SCIENCES

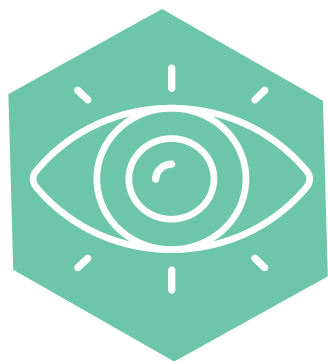




Examine



Explore




Experience



WE DON'T
TALK ABOUT
2020 . . . OR 2019 . . .
OR 2021 . . .




2019 : the year of beginnings

- University restructure at end 2018
 - College of Health and Human Sciences formed beginning of 2019
 - VR teaching space proposed
 - Space, budget, technology acquired
 - Budget put aside
 - Standardisation around in-person use of Oculus systems
 - Hire of temp agency specialist to prepare role for permanent employment
 - Role under guidance of permanent Learning Technologist
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Internal Plus

- Vast majority of CDU students located off-campus
 - Draw to study from home and not attend; impacting internal classes
 - On-campus student engagement plan
 - Non-unit specific VR experiences to assist comprehension
 - Anatomy & Physiology
 - Psychology
 - Sports Science
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Internal Plus

- Complaints by external students of unequal learning opportunities
 - Responding to those complaints, directed to cease *Internal Plus* engagements
 - With majority of courses being dual mode, severely constrained usage
 - Remaining VR usage limited to equal experiences for both Internal and External students
 - Extremely limited
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2019 : the other stuff

- University financial squeeze
 - Announcement of course rationalization and job cuts
 - Hiring freeze
 - Low engagement by academic staff owing to uncertainty
 - Attempts to expand Oculus experiences to external students failed
 - Nausea, boredom, frustration.
 - “Like watching my brother play computer games”
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2020 : The long sigh...

- By the start of 2020:
 - Internal Plus was dead
 - No delivery to internals in Mixed Mode units
 - Renovation complete with last technology install
 - HIVE to be officially opened by Vice Chancellor 21 March, 2020
- 




2020 : The long sigh...

- March 12, 2020: WHO declares Covid-19 a pandemic
 - March 19, 2020: Public health emergency is declared, and campus shut down
 - All students moved to external
 - All staff teaching remotely from home
 - Learning Technologists tasked with supporting remote teaching
 - HIVE on hold
 - June 2020: Community engagement programs begin
 - ADF, schools, workplace education
 - September 2020: HIVE-connected permanent position made redundant
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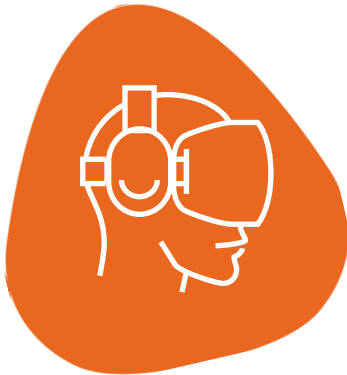
2021 : treading water

- HIVE scrambling for purpose
 - Community engagement programs continue
 - Most students encouraged to remain off-campus
 - No permanent staff
 - Highlight: new paramedicine course with integrated VR elements
 - Permanent learning technologist role filled late 2021
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Now : A new beginning

- *HIVE@Home* strategy emphasizes building experiences for external students
- Focus upon resource construction over employing commercial ones
- Three base-level technologies
 - WebXR
 - Google Cardboard
 - Merge Cube

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Now : Immersive experience, integrated education

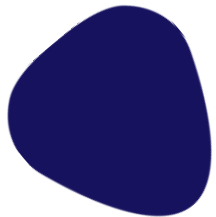
- Requiring new elemental skill sets



3D Scanning and digitization



360 video and photography



App development



3D Digital modelling



Now : Immersive experience, integrated education

- Emphasis upon location
 - Urban, Suburban, Regional, Rural, Remote food stores for Nutrition
 - Urban, Remote child-care centres
 - Virtual home visits for aged care, physiotherapy, pharmacy, paramedicine, social work and psychology
 - Virtual tours of industry-specific locations, ie, labs, storefronts, etc.
- Emphasis upon experience
 - 360-degree video – client experience
 - Paramedicine, health support, psychology, child care
 - 360-degree immersive virtual events
 - Scene analysis - highlighting observation and uncommon scenarios

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Now : Immersive experience, integrated education

- Emphasis upon detail
 - Accurate and detailed digital models
 - Interactive



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Merge cube

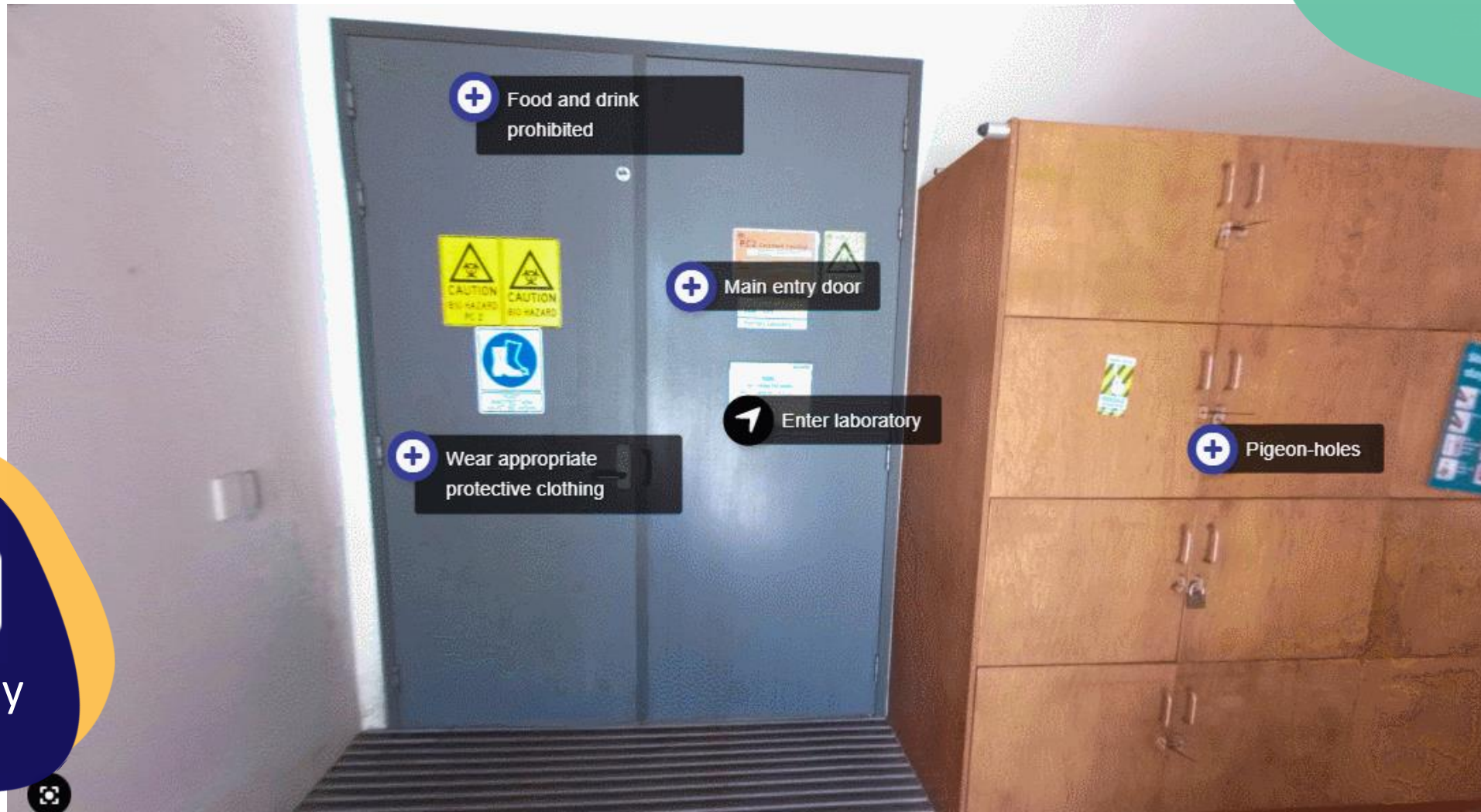
HIVE
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VR Ready

Virtual Tours

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VR Ready

Scene analysis

HIVE
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VR Ready

360-degree Video

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VR Ready

360-degree Video

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VR Ready

3D scanning

Building digital twins from real objects to be shared virtually.



Photogrammetry

Building digital twins from real objects to be shared virtually.



Apps



Hundreds of commercially available virtual reality interactions.

To delight.

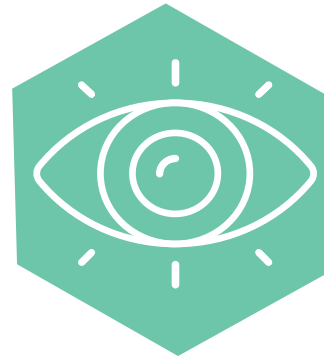
To engage.

To disarm.





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Take the tour



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