



Independent Riders VR News

Volume 01 | Issue 01

Need more information: E-mail: info@eatmyshorts.com.au or Ph: 0409 575284

Introduction

Welcome to Independent Riders monthly VR news, a contribution to the organisations that utilise VR (Virtual Reality) tools. Independent Riders Australia provide limited support for the VR units on loan or gifted to local community organisations. Our current suite of VR equipment include the following models and configurations:

Headsets

- Oculus Go 64 Gigabyte. *Available for use through Fraser Coast Family Networks*
- Oculus Quest 64 and 128 Gigabyte. *Available for use through Fraser Coast Family Networks and Independent Riders Australia*
- Oculus Quest II 64 Gigabyte and 256 Gigabyte. *Currently on back order.*

Recording

- Go Pro Fusion can record up to 256 Gigabyte. *Available for use through Independent Riders Australia.*

Printing

- Creality ENDER-5 3D Printer (22x22x30cm)

Our Models

- Oculus Go. Entry level, single controller but can be configured for two. Excellent for use in view VR videos, VR chat in a safe environment, some games as well as educational tools. Integrated sound and microphone, 2 hour battery time before recharge. Oculus Go are no longer produced however support for these will continue to be available until late 2022
- Oculus Quest. More advanced models, suitable for more active VR experiences including artistic and other creative tools. Standard with two controllers, Soft Touch (*ability to use hands for some apps and functions*), configurable inbuilt perimeter guardian, automatic forward cameras if exiting guardian. Battery life 3 hours before recharge
- Oculus Quest II. Release date 13 October 2020, we have several of these on back order. Greater functionality, resolution than Quest, lighter model and faster processor. Comes with two controllers and Soft Touch, configurable inbuilt perimeter guardian, automatic forward cameras if exiting guardian.
Yet to be reviewed
- Under review

- Under review



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New Release Apps

	<p>Back to Job Simulator</p>			<p>Gravity Sketch. Creation tool providing the ability to communicate ideas in 3D. Six different creation tools & custom environments.</p> <p>Tilt Brush. Ability to paint and design in a 3D space using three-dimensional brush strokes. Your room is your canvas.</p>
<p>Available in Quest and Quest II</p>		<p>Available in Quest and Quest II</p>		<p>Available in Quest and Quest II</p>

Educational Apps

	<p>Oculus First Steps. A fun introduction to VR</p>	<p>Oculus Gallery, YouTube VR. Available in Quest and Quest II and Oculus Go</p> <p>These and other apps include: 360 Degree Photo's and movies.</p>		<p>Jurassic World. Experience dinosaurs up close and personal, educational and fun experience. Available in Quest and Quest II Oculus Go</p>
<p>Available in Quest and Quest II and Go</p>		<p>Available in Quest and Quest II and Go</p>		<p>Available in Quest and Quest II and Go</p>

Social and Special Interest Apps

	<p>VR Chat / VTime XR. Create safe and interesting environments to socialise. Custom Avatars in a safe hosted environment. VR Chat for Quest and Quest II. VTime VR for Oculus Go.</p>	<p>Beat Saber A unique rhythm game where your goal slash the beats that a represented by small cubes as they come towards you. Excellent for hand/eye co-ordination or exercise while listening to some great sounds</p>		<p>TRIPP. Helps to feel calm and focused. This app provides regular mindfulness practice and help to reduce stress and build the resilience that one needs to stay healthy inside and out.</p>
<p>Available in Quest and Quest II and Go.</p>		<p>Available in Quest and Quest II</p>	<p>.Available in Quest and Quest II Similar apps in Go</p>	

There are a multitude of titles from education, sport, games as well as relaxation. Each month we will highlight a few of these.

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Areas where Virtual Reality may be of help

Chronic Pain. Therapeutic virtual reality can be used to reduce severe pain in hospitalised patients, according to a study published August 14, 2019 in the open-access journal PLOS ONE by Brennan Spiegel of Cedars-Sinai Health System, USA, and colleagues.

Therapeutic virtual reality (VR) is emerging as an effective, non-pharmacological treatment modality for pain. VR sessions have been used to help treat anxiety disorders, support physical rehabilitation and distract patients during wound care. Previous studies testing the intervention in hospitalised patients have been limited by short intervention times and lack of randomization.

In the new trial, researchers randomized 120 people who were inpatients at Cedars-Sinai Medical Centre in Los Angeles between November 2016 and July 2017. Patients were eligible if they had a pain score of more than 3 out of 10 during the 24 hours preceding inclusion. 61 people randomised to the intervention group received a library of 21 immersive virtual reality experiences—including a guided relaxation in natural environments, a simulated flight, and animated games—on a Samsung Gear Oculus headset. They were advised to use the headset for three ten-minute sessions over the subsequent 48 hours. 59 people in the control group were instead instructed to tune their television set to a health and wellness channel that included guided relaxations and poetry readings. (The authors note that VR exposure times of over ten minutes had a higher risk of cyber-sickness.)

On average, self-reported pain scores went down by 0.46 points (SD 3.01) in the control group and dropped by 1.72 points (SD 3.56) among people who used VR. Among patients with baseline pain above 7 out of 10, this difference was more pronounced, with a reduction of 0.93 points (SD 2.16) in the control group and of 3.04 (SD 3.75) in the VR group ($p=0.02$). Effects of the VR intervention on pain were significant both initially and after 48 to 72 hours of use, and patients reported higher satisfaction with the VR experience than with watching television. There was no difference in opioid prescribing between the study groups.

While it's still not clear whether different forms of VR have varying efficacy, this study does support the effectiveness of VR for managing inpatient pain. This effectiveness also prompts many questions deserving future study, especially

Disabilities. The advantages of virtual reality for learners with disabilities

By creating environments that simulate a person's physical presence in worlds real or imagined, VR can help learners with disabilities expand their knowledge, skills, and attitudes in ways that wouldn't have been possible otherwise, enabling them to engage in learning activities relatively free from the limitations imposed by their disability, and in complete safety. VR also helps create empathy or expand knowledge about people with disabilities in others by helping them experience disabilities through simulated environments. Here are some of the more obvious advantages.

Overcoming physical limitations

For learners with physical disabilities that limit their movement, VR can offer access to learning experiences that were previously unattainable. By giving them the ability to navigate a virtual world at will, without restraints, VR can help them experience things they could have only ever imagined otherwise: for example, a person using a wheelchair could learn about surfing standing up.

2. Language immersion

One of the best ways to learn a new language is through full immersion, as this requires students to listen to and speak the language they're learning

3. Skills training

Virtual reality simulations can also help students learn practical skills

4. Philosophical theories

Even philosophical theories can be brought to life with virtual reality. The Sevenoaks School in the United Kingdom recently started using VR headsets in its philosophy lessons as a way to introduce students to French philosopher Rene Descartes' dream argument.

5. Architecture and design

Schools are also finding that virtual reality technology is a great way to spark students' creativity and keep them engaged, especially when it comes to architecture and design.

6. Special education

The Jackson School for special needs students in Victoria, Australia has been using the Oculus Rift headset with students in the classroom. Link for more information:



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<https://www.edweek.org/ew/articles/2014/08/27/02oculus.h34.html>

7. Distance learning

Virtual reality technology also has huge potential in the distance learning industry

8. Improved collaboration

Virtual reality technology has the potential to greatly enhance collaboration between teachers and students, both in distance learning and classroom-based teaching.

9. Game-based learning

Virtual reality will likely completely change the way games can be used for learning. Game-based learning works because it increases engagement and motivation, and virtual reality can take this to the next level.

10. Virtual campus visits

The virtual reality tours use photos and videos of campuses and their surroundings that enable students to explore the campuses at 360-degree angles.

around the possibility of therapeutic VR's ability to potentially reduce opioid requirements.

More information visit the following sites:

<https://www.healthline.com/health-news/vr-can-help-treat-severe-pain>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6613199/>

Creating safe spaces

Virtual reality could be used to help learners with communication challenges like autism or Asperger's develop and practice social skills in non-threatening environments, including offering access to learning opportunities from the safety and comfort of their own homes. Conversely, it could also be used to help people experience the world from the perspective of those learners.

Providing risk-free experiences

For people learning how to deal with new physical or sensory disabilities, difficult or risky learning experiences can be had safely through VR. First-time wheelchair users, for example, could use VR to learn how to navigate a busy street or shopping centre in a virtual environment, safely understanding how to move around and avoid obstacles in that virtual setting before venturing into the real world.

Personalised learning

For learners with diverse special needs and learning styles arising from different disabilities, VR can help adapt learning experiences. For example, VR is an effective tool for helping autistic children learn social interaction and nonverbal cues in individualized settings. Virtual environments or input stimuli are controllable to match what is tolerable to the learner.

Eliminating distractions

VR can provide a distraction-free experience for learners with attention deficiency challenges because the virtual reality headset completely covers their frame of view. The immersive environment of a VR experience can promote sustained focus and attention.

Mental Health. With some of the most unenviable mental health statistics in Australia, use of such tools may be one option worth considering? While we are still a long way from being able to provide timely mental health treatment to everyone who needs it, VR-enabled therapy is a relatively new treatment with a promising new approach.

What is VR-enabled therapy?

VR-enabled therapy is the use of virtual reality technology for psychological therapy. Patients navigate through digitally created environments and complete specially designed tasks tailored to treat a specific ailment.

Moving into the later part of 2020 Independent Riders Australia and Our Community Fraser Coast Inc will provide additional VR Headsets to organisations such as MACE Wide Bay to use with young clients facing trauma from abuse and needing support.



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Mental Health cont... patient's fears and potential to address a variety of other mental health problems. VR has an extraordinary ability to create powerful simulations of the scenarios in which psychological difficulties occur.

Mental ill-health costs in Australia for 2017-18 alone was \$6 billion. Reference: <https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-contents/expenditure-on-mental-health-related-services>
Perhaps this is an option we can ill afford not to consider?

Education. How Virtual Reality is used.

1. Virtual field trips
Virtual field trips have become one of the most popular applications of VR technology, this could include recording of a group excursion or watching those that are pre-recorded
2. Enjoy virtual time with a favourite animal or exploring new places, hobbies or the experiences of others
3. Learning new skills, play tennis with a virtual friend or someone you know
4. Watch a movie or take a stroll in VR to relax.

The choice ultimately is yours or your clients.

Care and Maintenance

These units are well made however they will not tolerate rough handling and are not waterproof. After each person uses the device, headsets need to be wiped down with a damp (*Not Wet*), anti-bacterial wipe. VR disposable face masks are also available. These masks are specifically designed for use with the headsets.



Picture of mask inset.

One such VR-enabled therapy treatment for clinically diagnosed fear of heights which has been developed by Oxford VR (<https://ovrhealth.com>), has demonstrated to be successful in reducing

Where can I use these headsets?



Fraser Coast Family Networks have a number of these devices for hire and have found that VR helps those with disabilities by expanding knowledge, skills, experiences as well as assisting with relaxation and development or practice with practice social skills.

VR FREE FROM LIMITATIONS AND DISTRACTIONS.

To Book, Call the FCFN Team on 4123 4735

Some of our happy VR customers.





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