ALPHA IMMERSION

Scaling OVA Training: The Opportunities and Practical Realities of Virtual Reality

EML OVA Community of Practice | Masterclass

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Today's Masterclass

1. Workforce training challenge
2. What VR offers
3. Considerations for VR in practice
4. Measuring success





Why OVA training needs to go beyond knowledge



Knowledge

Understand policy, warning signs, and de-escalation principles.

+

Behavioural Skills

Interactions require situational awareness and adaptive decision-making capability.

+

Transfer

Apply in work environment under pressure.

VR behavioural skill development



Where VR adds value

- Repetitive practice in safe environment
- Decision-making under pressure
- Experiencing different outcomes

- Developing situational awareness & hazards
- Recognising escalation cues
- Practising verbal de-escalation
- Developing empathy & perspective taking

Kolb, (1984)

What makes VR a scalable training solution?

Consistency

Standardised scenarios and learning objectives

Repeatability

Practice without recreating live encounters

Accessibility

Potential delivery across locations & shifts

Flexibility

Short sessions integrated into existing WHS programs

Measurability

Participation, decisions and learning data

Pottle (2019); Stephan et al. (2023)

Choosing the right VR format for your learning objectives



360° Video

Filmed first-person environments

- ✓ High visual realism
- ✓ Repeatable exposure
- – Interaction varies by design
- – Motion sickness potential
- – Changes can be restrictive

Best for: Recognition and awareness



Branching Decisions / Narrative

Pre-defined choices and consequences

- ✓ Active decision making
- ✓ Highly repeatable with different outcome pathways
- – Lower conversational flexibility

Best for: Standardised repeatable practice

Choosing the right VR format for your learning objectives



Multi-player

Multiple participants in the same scenario interacting in real time

- ✓ Interprofessional collaboration
- ✓ Role allocation & communication
- – Higher technical & resource considerations

Best for: Complex team-based scenarios



Conversational AI

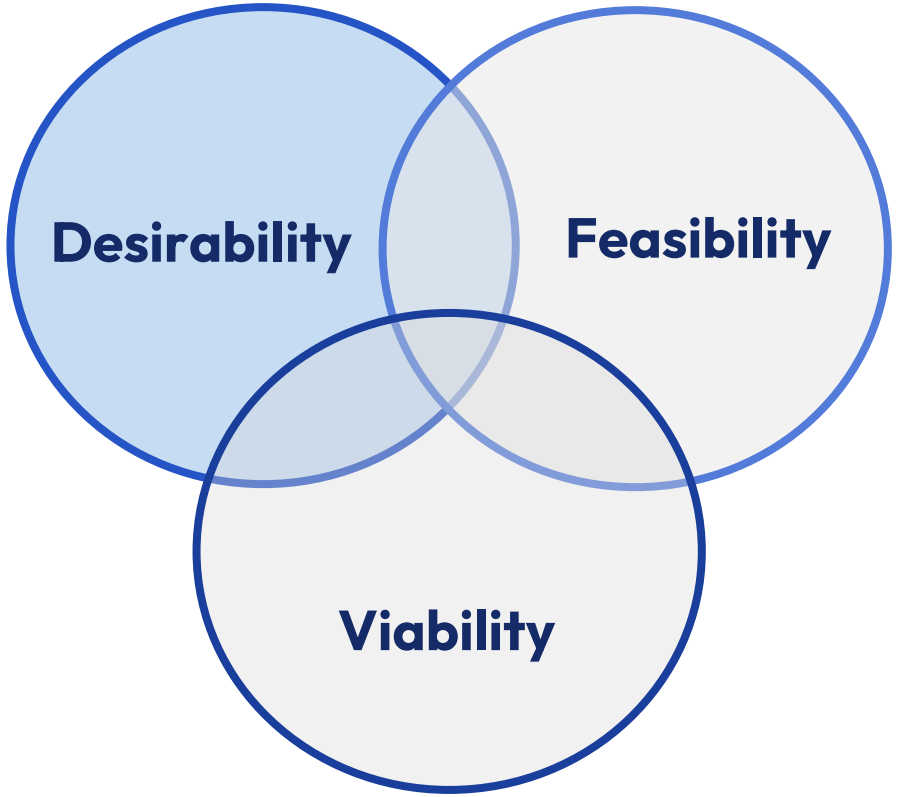
Dynamic, open-ended interaction

- ✓ Authentic, flexible verbal practice
- ✓ Less predictable conversations
- – Greater privacy, validation and ICT considerations

Best for: Varied communication practice

Human Centred Design

Do learners need & value?



Co-design
Are we solving a problem that matters to people?

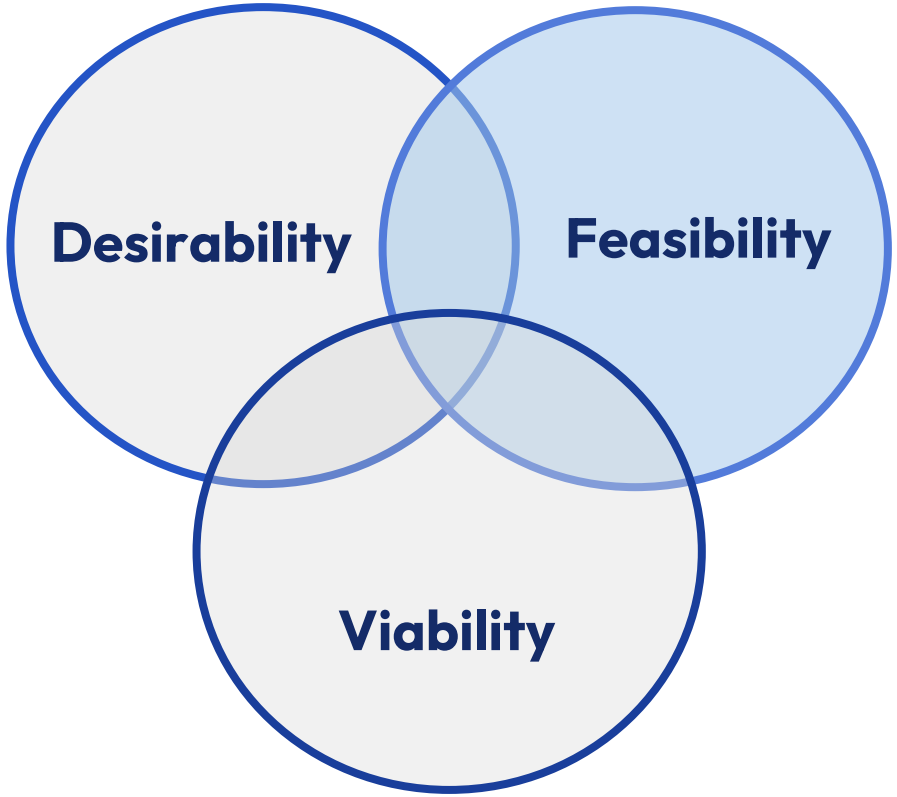
Fidelity
Does the experience realistically reflect the demands of the workplace?

Usability
Is the VR experience intuitive, accessible and ease to engage with?

(Brown, 2008)

Human Centred Design

Can we make it work?



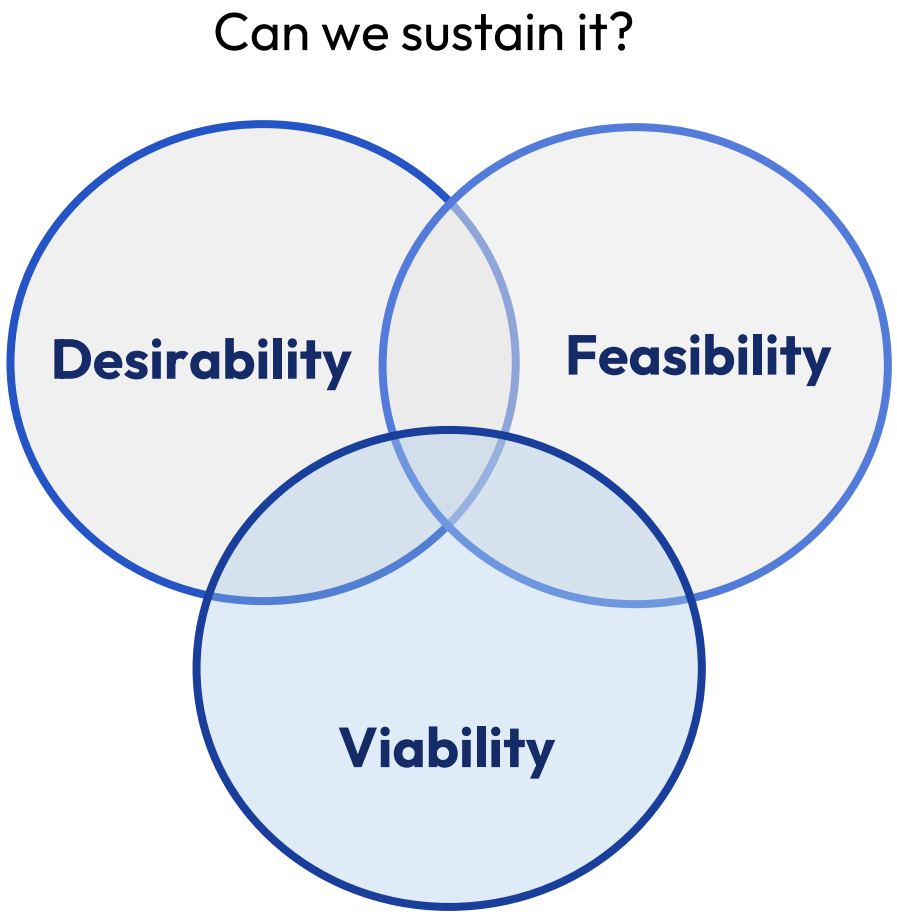
Technical infrastructure
Do we have suitable hardware, IT access and connectivity and troubleshooting ability?

Operational delivery
Can training fit within existing schedules & locations?

Accessibility
Can staff with different physical, sensory or technological needs participate?

(Brown, 2008)

Human Centred Design



Organisational value
Does the training address a meaningful workforce need?

Support
Can equipment and facilitator capability be maintained?

Long-term integration
How will VR become part of routine training?

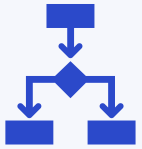
(Brown, 2008)

Trauma-informed VR implementation

VR experiences can feel more immediate and emotionally engaging.

Create learning that minimises the risk of further distress or re-traumatisation.

Choice



Clear pre-briefing, informed participation, opt-out points & alternatives.

Psychological Safety



Content warnings, appropriate debriefing, VR protocols, workplace support if needed.

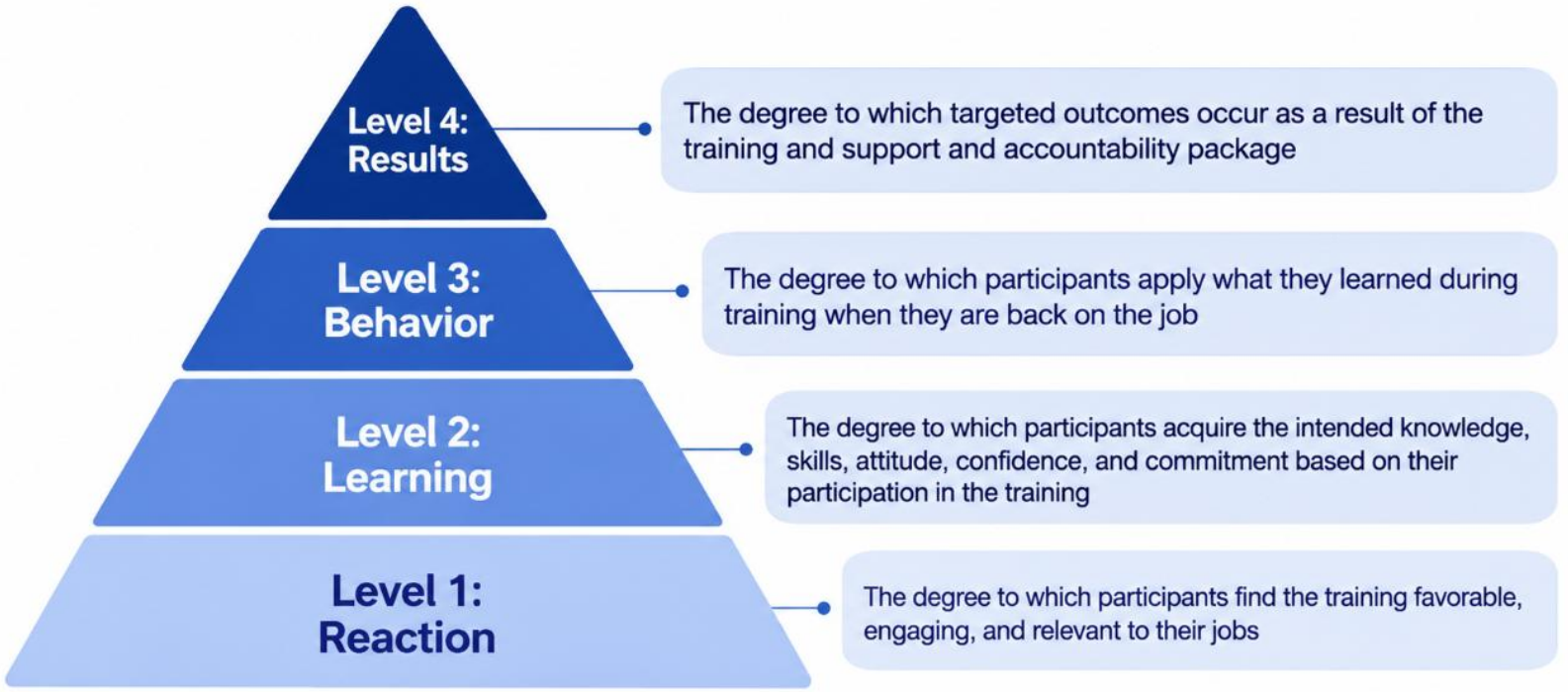
Data Governance / Privacy



Information on data collected, access, storage and retention.

Kirkpatrick Model

Is the training effective?





Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016)

Evaluating VR Training: Research Tools

Usability

System Usability Scale (SUS)

Effectiveness & engagement

Serious Educational Game in Nursing Appraisal Scale (SEGiNAS)

Attitudes

Management of Aggression and Violence Attitude Scale (MAVAS)

Confidence

Confidence in Coping with Patient Aggression (CCPAI)

Behavior

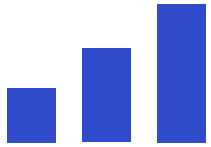
Self-reports, workplace audits, reflective practice, retention of learning

Implementation and integration

Normalisation Measure Development (NoMAD) (purpose, practice, worthwhile)

Organisational Scalability

Consistent, effective training across the workforce



Resource efficiency

- Cost per learner
- Learners per facilitator hour
- Utilisation metrics
- Technical support & maintenance



Operational reach

- % of target workforce trained
- Integration into existing training
- Repeat participation

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Questions?