Virtua College GeoLab VR Pilot Proposal

Enhancing Student Engagement and Applied Learning in Earth Science

Institution: Post-Secondary, College, and Universities
Program Area: Geology
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Executive Summary

This proposal outlines a **flexible pilot deployment of GeoLab**, Virtua's immersive virtual geology lab, designed to increase student engagement, applied learning, and scientific reasoning within geology courses.

Recognizing the structure of course delivery, this pilot is intentionally designed to:

- Minimize institutional risk
- Maximize instructional impact
- Provide scalable pathways for future expansion

Rather than a one-size-fits-all model, three implementation options are presented to align with budget, scope, and strategic intent.

The Opportunity

Geology courses often face:

- Lower engagement relative to core courses
- Limited access to physical lab resources
- Challenges translating theory into applied understanding

GeoLab addresses this by transforming learning into **interactive investigation**, where students actively engage in scientific processes rather than passively consuming content.

The Solution: GeoLab Immersive Learning

GeoLab enables students to:

- Identify and classify minerals and rocks in a virtual lab
- Apply observation, analysis, and interpretation skills
- Learn through iterative exploration and feedback

This approach aligns with experiential STEM learning, where students **participate in science rather than observe it**.

Pilot Deployment Model

- Installation via APK on Meta Quest headsets
- No LMS or infrastructure changes required
- Immediate classroom integration

Available deployment scale: **24 to 48 headsets**

Implementation Options

Option 1 - Per-Headset License (Flexible Entry Point)

Best for: Budget-conscious adoption and rapid approval

- $100 USD per headset
- Minimum: 24 headsets
- Maximum: 48 headsets

Includes:

- GeoLab software license (per device)
- On-site installation and configuration
- Basic instructor orientation

Does not include:

- Updates or future platform enhancements

- Ongoing support

Positioning:
A low-risk entry point to introduce immersive learning into the classroom.

Option 2 - Academic Innovation Package (Balanced Approach)

Best for: Institutions seeking both implementation and measurable value

- $250-$300 USD per headset

Includes:

- GeoLab software license
- On-site installation and optimization
- Structured faculty onboarding session
- Pilot evaluation framework
- End-of-pilot summary report

Value:

- Enables both **instructional deployment and outcome measurement**
- Supports internal justification for future expansion

Positioning:
A complete instructional enhancement, not just a software deployment.

Option 3 - Institutional Pilot Program (Strategic Partnership Model)

Best for: Leadership-driven innovation and future scaling

- **Flat fee: $8,500 - $12,000 USD**
- Covers up to 48 headsets

Includes:

- Full GeoLab deployment
- On-site installation and support
- Faculty onboarding and integration strategy

- Pilot evaluation and impact report
- Advisory support during initial implementation

Value:

- Removes per-device constraints
- Maximizes utilization across courses and sections
- Positions institution as a leader in immersive STEM education

Positioning:
A strategic academic pilot, designed for institutional impact and future growth.

Implementation & Delivery

All options include:

- On-site deployment by Virtua
- Device setup, testing, and validation
- Instructor guidance for classroom integration

Estimated travel and delivery cost:
~$1,100 USD (travel & accommodations)

Measurable Outcomes

This pilot can be evaluated through:

- Student engagement (time-on-task, participation)
- Learning outcomes (pre/post assessments)
- Student confidence and perception
- Faculty feedback on instructional effectiveness

Strategic Value to the Institution

This initiative enables Colleges and Universities to:

- Enhance engagement in STEM courses
- Introduce immersive, applied learning without infrastructure changes
- Pilot innovation in a controlled, measurable way

It also establishes a foundation for expansion into:

- Environmental science and climate modules
- Cross-disciplinary immersive learning
- Workforce-aligned training applications

Video Demonstration

GeoLab in action: Virtua GeoLab Experience Video; Virtua GeoLab Video
https://www.virtuacampus.tech

Next Steps

- Select preferred implementation option
- Confirm number of headsets (24-48)
- Schedule deployment and onboarding

Contact

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