Evaluation of VREP High School Engineering Intervention

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Need and Industrial Relevance

Research Thrust Area: Design Education

VREdP
Virtual Reality Education Pathfinders (VREdP)
Project Goals

VREP (Virtual Reality Educational PathFinder) has impressive qualitative results, but little data.
Objectives

How does VREP affect students?

- Higher GPAs?
- College-bound math?
- Fewer school absences?
- Enrollment at better colleges?

What are the critical factors for VREP success?
Approach and Methods

Collect student data from over 50 schools.

(Permissions already in place)

Build database.

Compare with similar non-VREP students.

Facilitate company visits to VREP Showcases.
Outcome/Deliverables

Evaluation of VREP

Guide to a Successful VREP

Heightened Industry Relationships
Impact

14 Grand Challenges for Engineering

- Advance Personalized Learning
- Enhance Virtual Reality

Alternative schooling approach for STEM

Better school-industry relationships
Project Duration & Proposed Budget

T1: Observe VREP Implementations
T2: Develop Student Database Structure
T3: Collect & Enter Data
T4: Analyze Data
T5: Report, Pubs, Internships

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<tr>
<th>Task 1, 2, 3 in parallel</th>
<th>Task 4</th>
<th>Task 5</th>
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<tbody>
<tr>
<td>3 mos</td>
<td>6 mos</td>
<td>9 mos</td>
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Task 4

$48,000

Strategic Planning Meeting at Iowa State University – Feb 2012