

## The Virtual Reality Learning Lab

The configurations of virtual reality labs are based on specific sate standardsusually 25 student workstations, one teacher workstation, and a large screen monitor to view the teacher's computer screen. The lab structure is designed to (1) give students adequate access to technology tools, and (2) to involve a

majority of teachers in project-based instruction and the incorporation of technology tools.

Means reports, "one of the major decisions that schools embarking on a technology implementation must make is whether to group the computers in separate laboratories, which allow students to work individually on computers, or whether to disperse the among the regular classrooms. There is a wide range of strategies for allocating computers." For the special need



of serving a large number of at-risk children, the computer lab model is ideal. This setup is appropriate for the our model of instruction, as it allows for greater access by a number of different classrooms and grades, a more efficient use of technology resources. Furthermore, it allows an entire classroom to explore together, simultaneously, an important facet of engaged learning pedagogy. The lab setup is also ideal as less personnel and technology coordination is necessary to plan activities and keep the workstations running.

The disadvantage of the computer lab setup is that when computers are not located in the immediate classroom, teachers may be dangerously isolated from technology and find it easier to ignore. The lab is also less likely to affect the core program as it is less integrated into teacher lesson plans. To combat these tendencies and difficulties, the teachers using the lab will be involved in all facets of the plan, from extensive professional development, to integration into lesson plans, and finally, evaluation. Through these activities, an engaged-learning culture will be created, with teachers having a great personal interest in executing our program.

Following Means' engaged learning model, the virtual reality lab will be open from 8 a.m. to five p.m. daily. In addition to 24 scheduled classes each week (three one-hour sessions per classroom) the lab is open to students during school hours between scheduled classes and through lunch, as well as before and after school. Students will make heavy use of these flexible periods of access for project-related work, clarification of subject matter, and personal exploration.

## Schedule: Virtual Reality-Based Engaged Learning Lab

| Time       | Monday | Tuesday | Wednesday | Thursday | Friday |
|------------|--------|---------|-----------|----------|--------|
|            |        |         |           |          |        |
| 8:00 a.m.  | 1      | 1       | 1         | 1        | 1      |
| 9:00 a.m.  | C-1    | C-7     | C-1       | C-7      | C-1    |
| 10:00 a.m. |        | C-2     |           | C-2      | C-2    |
| 11:00 a.m. | C-3    |         | C-3       |          | C-3    |
| 12:00 p.m. | I      | 1       | 1         | 1        | I      |
| 1:00 p.m.  | C-7    | C-4     |           | C-4      | C-4    |
| 2:00 p.m.  | C-5    | C-8     | C-5       | C-8      | C-5    |
| 3:00 p.m.  | C-8    | C-6     | C-6       | C-6      |        |
| 4:00 p.m.  | I      | 1       | I         | 1        | I      |
| 5:00 p.m.  | I      | 1       | I         | 1        | I      |

I = Individual Student Time

C-1 = Open Classroom

C-2 = 2<sup>nd</sup> Grade, Classroom 2

C-3 = 3<sup>rd</sup> Grade Classroom 1

C-4 = 4<sup>th</sup> Grade Classroom 2

C-5 = 5<sup>th</sup> Grade Classroom 1

C-6 = 6<sup>th</sup> Grade Classroom 2

C-7 = 7<sup>th</sup> Grade Classroom 1

C-8 = 8<sup>th</sup> Grade Classroom 2

This schedule maximizes use of virtual reality technology throughout the school and provides for:

- 30 Classroom Periods
- 20 Hours of Individual Student Exploration
- Breakdown Of Lab Learning:

Focus- 15 minutes
Exploration- 15 minutes
Discussion- 15 minutes
(Varies by teacher discretion)