



# LUCILE PACKARD CHILDREN'S HOSPITAL SCHOOL LEARNING 2013

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# Meeting academic & socio-emotional needs

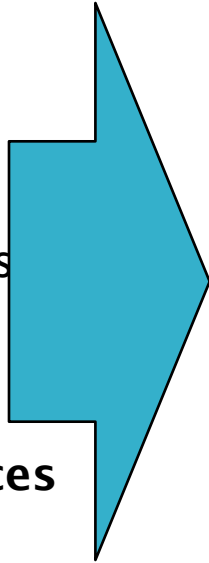
1. **Provide a “normal” life experience.** In almost every other area of the hospital it is clear that life is not normal. LPCHS should provide an **oasis of normalcy** where each student is a student and not a patient.
2. **Be aware and respectful of the needs of each student.** There is no average student at LPCHS. The school’s space should function well for all students. There should be space for IV poles, outlets for medical devices, and a functioning learning space for students who are in their beds. By designing for each of these needs we can make a space where their **needs are forgotten** and each student is simply at school.
3. **Facilitate academic excellence.** Illness affects every kind of student. Their medical condition and thus their school space **should not affect their ability to achieve.** LPCHS should provide a learning space that facilitates the learning each of these students wants to achieve.

The design challenges of LPCHS 2013 extended beyond one space. Rather than limiting our design we expanded to three learning spaces, connected by the community of learners.

Goals  
+ Personas  
+ Interviews  
+ Observations  
+ Scenarios  
+ Feedback  
+ Inspiration

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**3 Design Spaces**



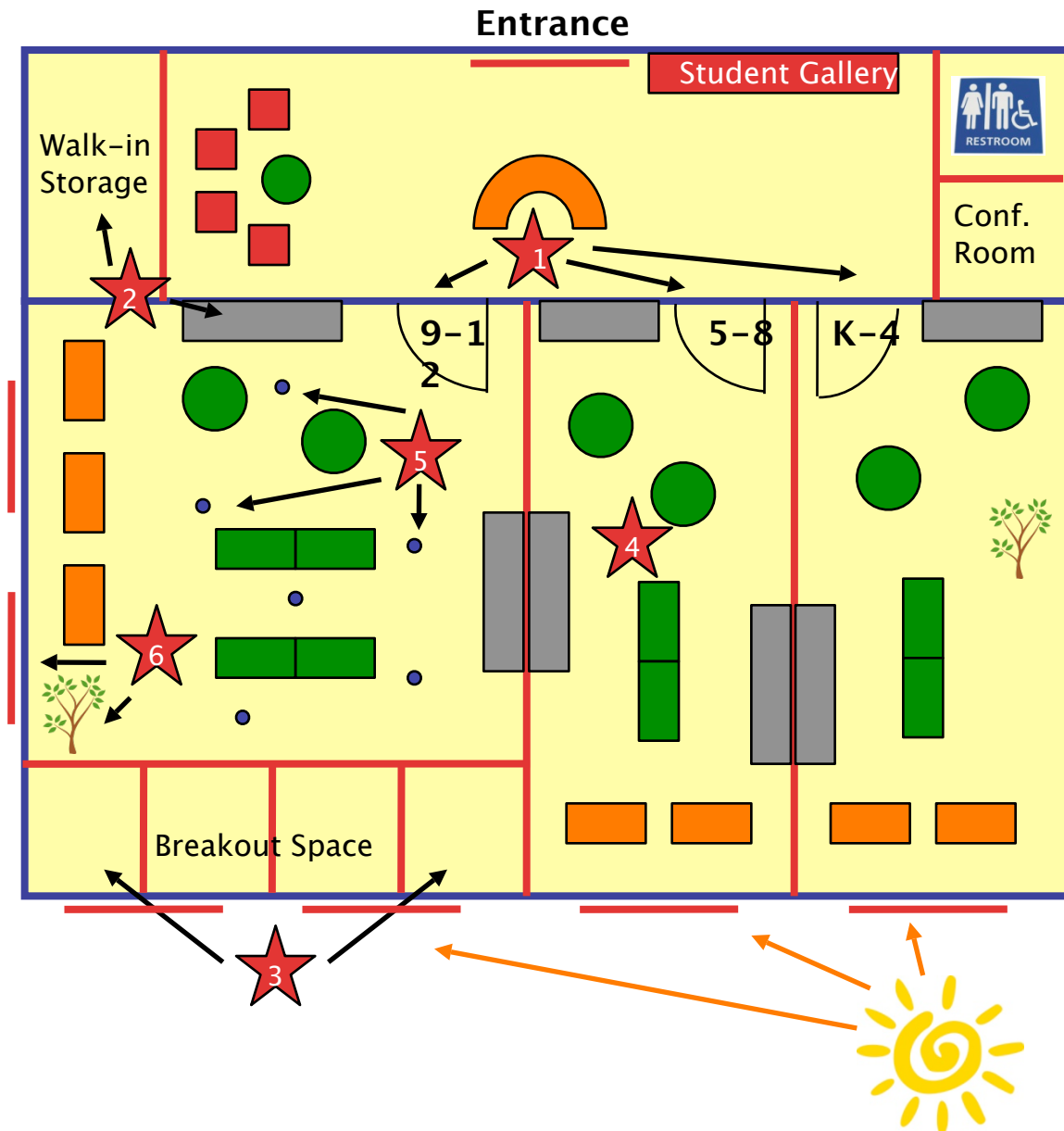
## 3 Spaces in LPCHS 2013

1. **Classrooms:** A “traditional” school with classrooms that students attend. A place to get away from nurses and procedures & learn.
2. **Bedside Learning:** A personal learning space that transforms the hospital room into a classroom. Bring the “normal” to the abnormal
3. **Virtual Learning:** A community that unites all the learners within the LPCHS community.

# Design Challenges

- **The Subject:** **Seeing sick children is difficult.** This project was more than an intellectual challenge, it was an emotional challenge as well.
- **Access:** LPCHS is open from 9:30–11:30 and 1:30–3:00 every day. To observe students we also had to fill out **visitor attestation agreements** that included not photographing the students. It took some scheduling effort—go Wiki!—but we were all able to see the school in action.
- **Now or Later?** What should we be designing, a tool for bedside learning, ready to implement **this year or a new space in the 2013** Bed Tower? We debated the merits of each and opted to do both—Learning 2013 at LPCHS.
- **“Space?”** **What counts** as a space? Seeing a need to create a community space for bedside or isolation learners we discussed a virtual space to meet that need. Is a lap-desk for bedside learning a space?

# New Classrooms: Floor Plan

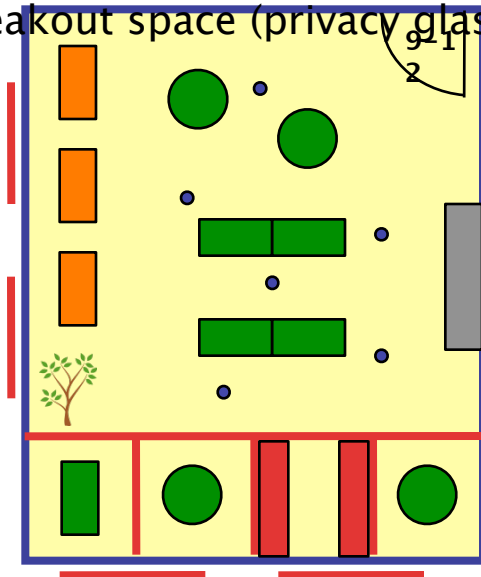


## Key Space Specific Needs

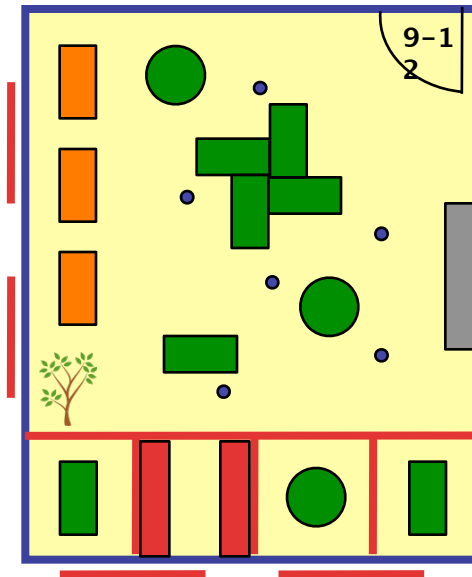
1. Separate classroom space for K-4, 5-8, 9-12
2. Storage for students/ teachers
3. Breakout rooms
4. Flexible workspace
5. Power outlets and wide walkways
6. Healthy environment

# New Classrooms: Flexible Workspace, Power, Access

- Need: Students need sufficient workspace and access to power outlets and wide walkways
- Learning Goals: Normal Life, Respect for Needs, Academic Achievement
- Design Solutions:
  - Moveable tables with whiteboard tops
  - Power outlets on floor + cordless power
  - Variety of seating in classroom and breakout space (privacy glass)



Layout 1



Layout 2

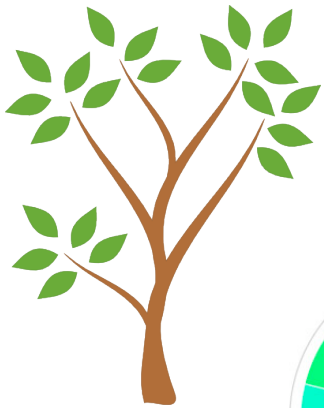
# New Classrooms: Sufficient Storage

- Need: Teachers and students need sufficient storage
- Learning Goals: Academic Achievement, Respect for Needs
- Design Solutions:
  - Storage bins personalized for students
  - Modular storage within the classroom
  - Walk-in closet for limited use items
  - Simple, functional, and durable



# New Classrooms: Healthy Environment

- Need: Students need a healthy school environment
- Learning Goals: Normal Life, Respect for Needs, Academic Achievement
- Design Solutions:
  - Natural light
  - Indoor-outdoor connection
  - Use of color to inspire

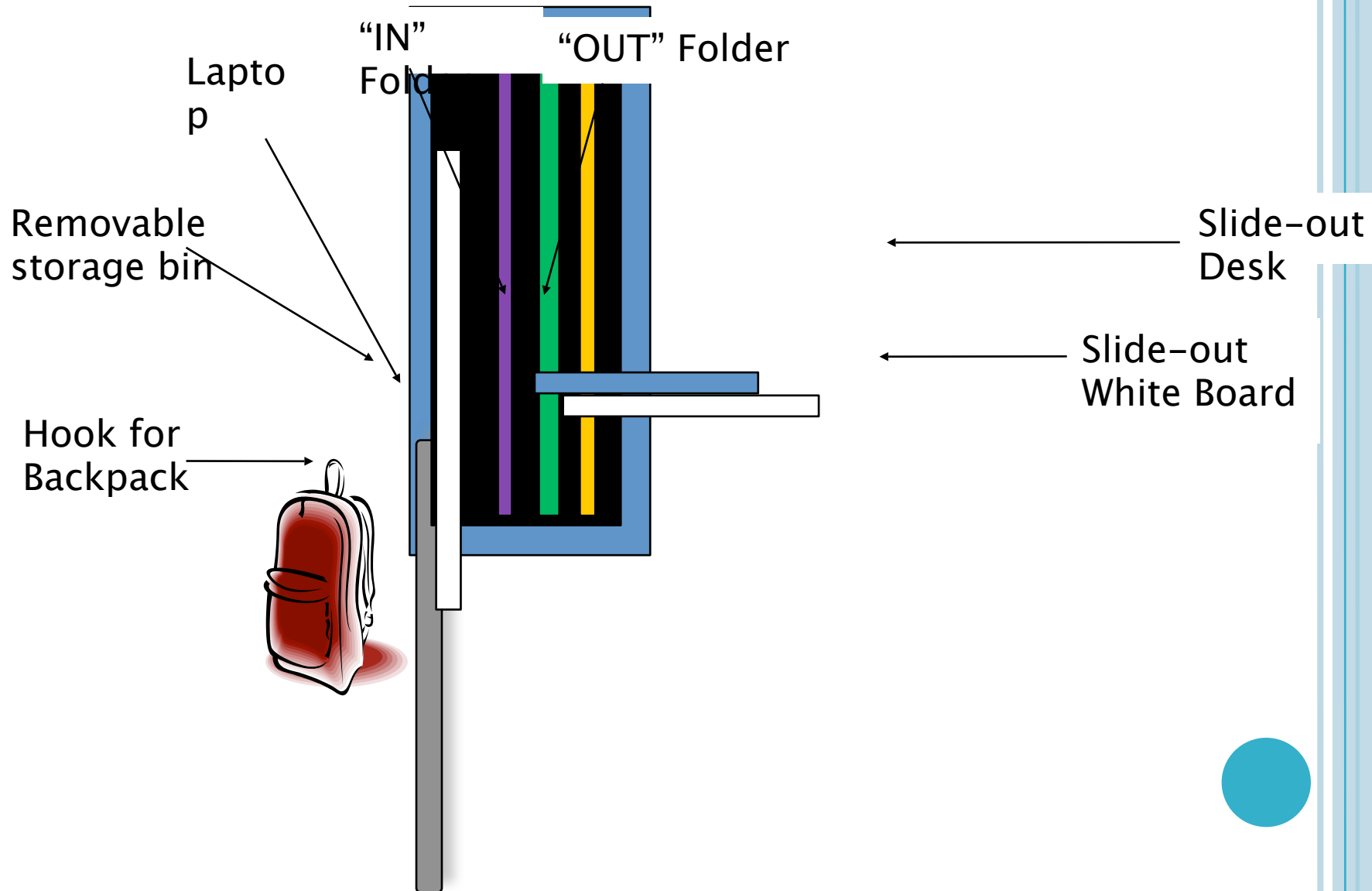


Nueva School Innovation Lab

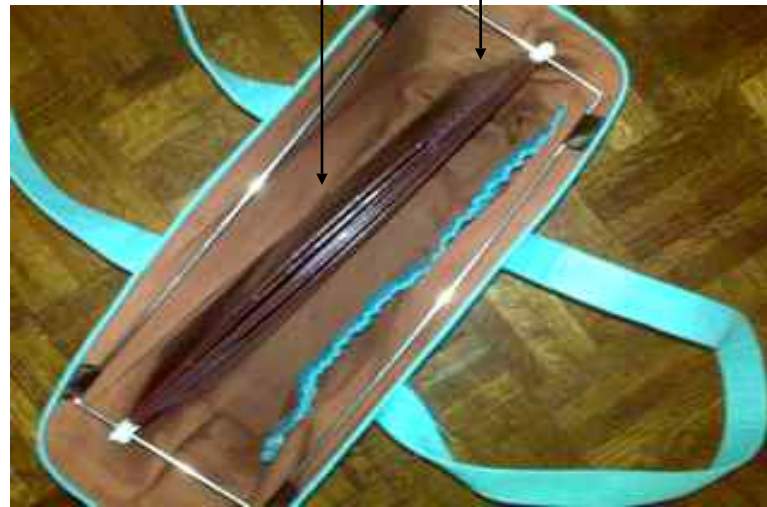
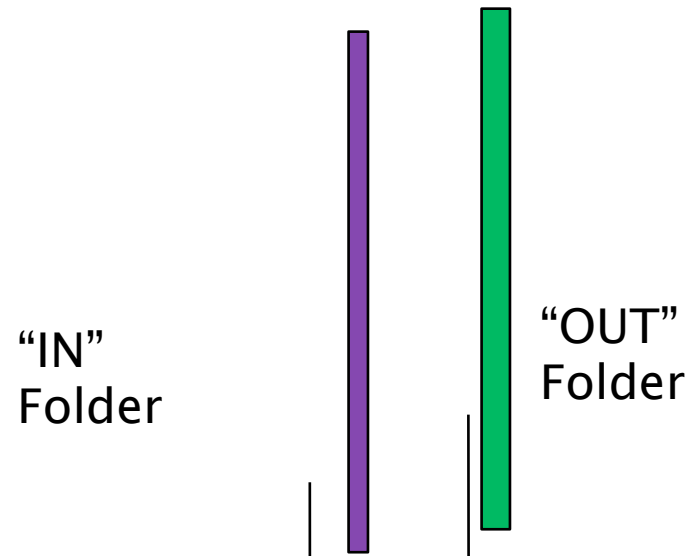




# Portable Learning Space: Rolling Lap-Desk



# Teacher's Bag



Teacher's Bag



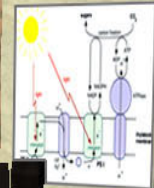
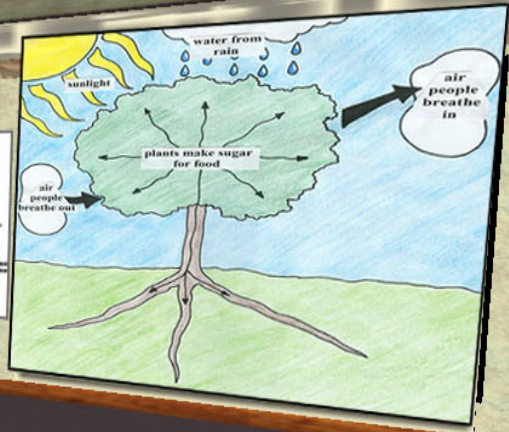


Lucile Packard  
Children's  
Hospital Virtual  
School



Lucile Packard  
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Hospital Virtual  
School  
Classroom-

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Children's Hospital



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Lucile Packard Children's Hospital Virtual School Classroom –

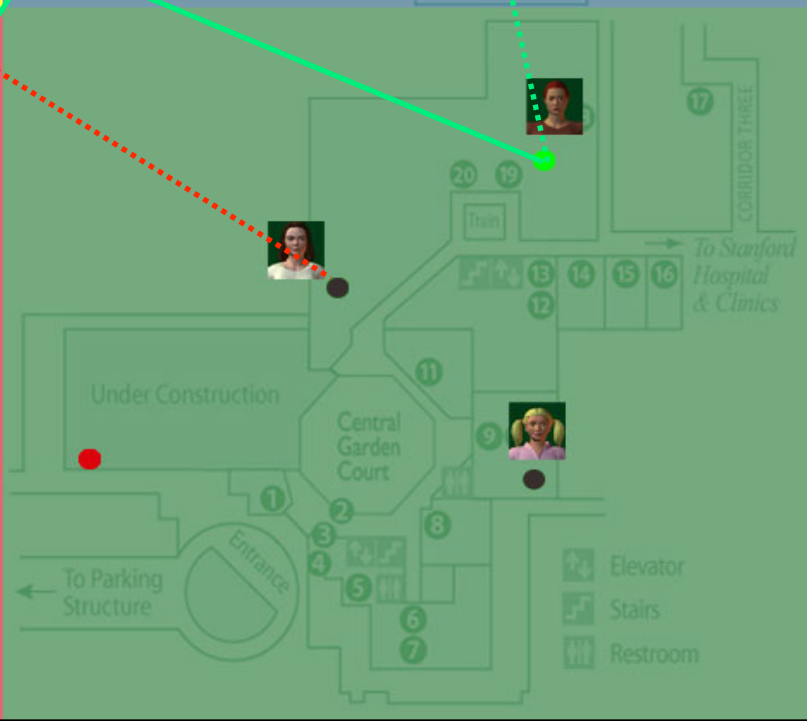
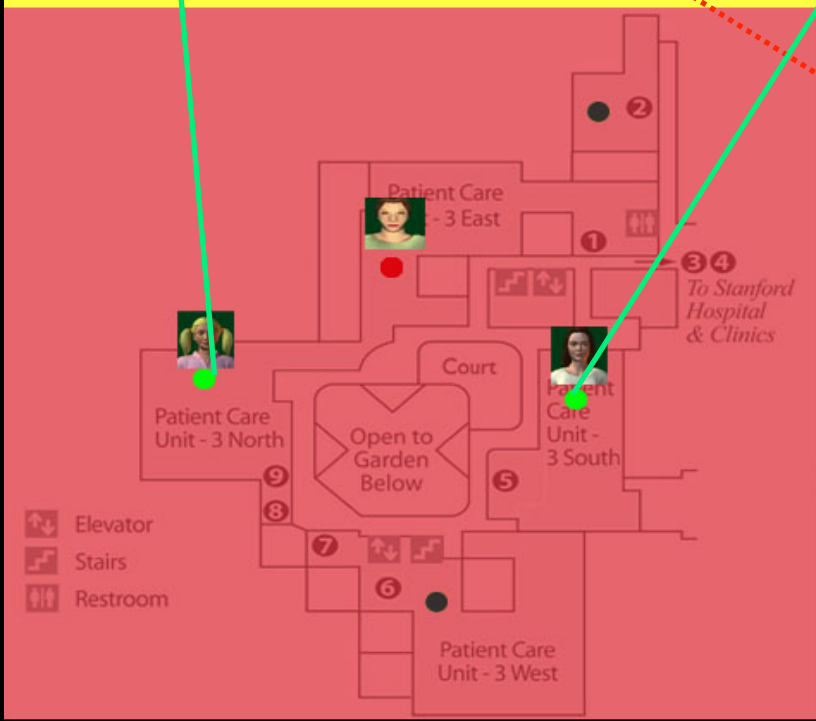
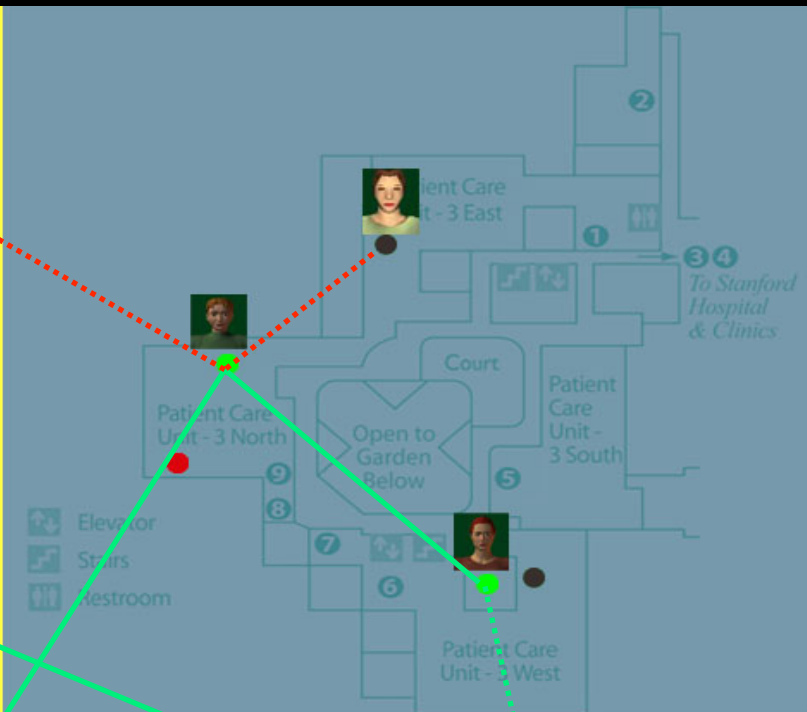
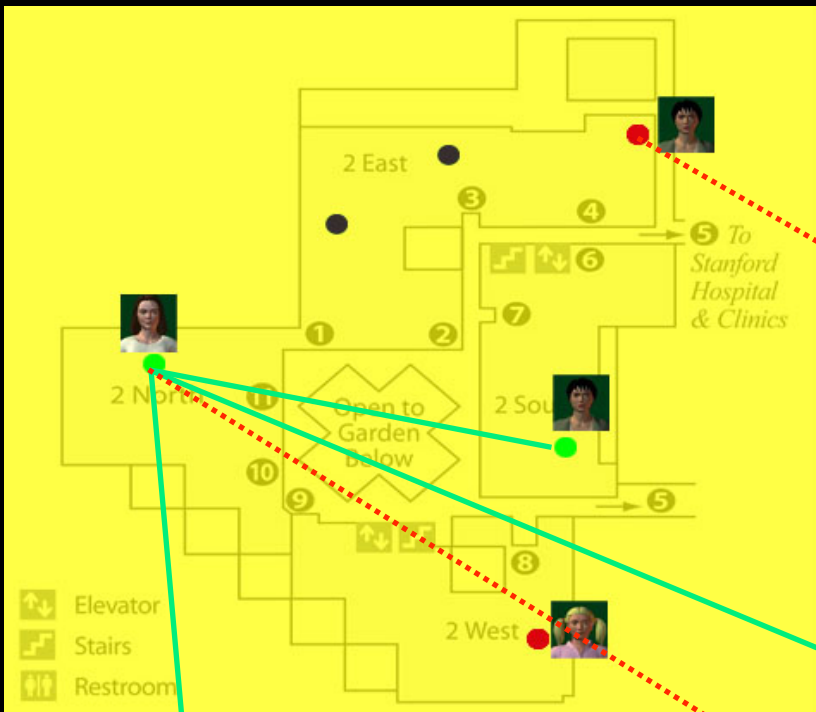
Students can carry out experiments in the virtual classroom.



## Hospital Virtual School Classroom-

Information and Communication Technology (ICT) is a video streaming facility that captures students' school of origin classroom. Students who is isolated at hospital can communicate with their school of origin with this technology.





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Children's  
Hospital Virtual  
School  
Classroom-

## Assessing Learning: Do these spaces Work

	Assessment Methods & Possible Metrics
Classroom	<ul style="list-style-type: none"> <li>◦ Surveys of students: Effectiveness of work done before and after. Amount of work completed.</li> <li>◦ Attendance rates: Are <b>more students coming to the classroom space</b> because it is a more usable space?</li> <li>◦ Teacher surveys: Is the space better meeting their needs? Do they have to <b>augment or change the space to make it usable</b>?</li> </ul>
Portable Bedside	<ul style="list-style-type: none"> <li>◦ Change in <b>amount of work completed by bedside/isolation students</b> or changes in study patterns of such students</li> <li>◦ Survey of students: ease of completing work before and after implementation.</li> <li>◦ Survey of teachers: ease of working with new system</li> <li>◦ Time it takes students to change room to “study space”</li> </ul>
Virtual	<ul style="list-style-type: none"> <li>◦ <b>Usage patterns</b> by students &amp; teachers: how much usage is there? How many students are logged on? How much “academic” work goes on?</li> <li>◦ Surveys for teachers: Ease of system use? Does system improve connection with current students?</li> <li>◦ Survey of students: Self image of students in isolation before and after implementation of virtual school space.</li> <li>◦ Change in work completed by students.</li> </ul>

The left side of the slide features a vertical stack of light blue and white stripes. Overlaid on these stripes are several teal-colored circles of varying sizes. One large circle is positioned near the top, with several smaller circles scattered below it.

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