

Wisdom is not the product of schooling but the lifelong attempt to acquire it. - Albert Einstein

University of Colorado at Boulder

## **Making All Voices Heard**

New Socio-Technical Design Environments for Community-Oriented Development Projects

Gerhard Fischer Center for LifeLong Learning & Design (L<sup>3</sup>D) <u>http://l3d.cs.colorado.edu/</u>

Department of Computer Science and Institute of Cognitive Science

# The Center for LifeLong Learning & Design (L<sup>3</sup>D)

• Part of: Department of Computer Science and Institute of Cognitive Science

#### Members:

- faculty members, post-doctoral fellows, visiting research fellows, Ph.D. and Master students, Undergraduates → horizontal and vertical integration
- a center with no walls  $\rightarrow$  membership criteria are intentionally vague
- the glue holding L3D together: shared research vision, weekly L3D meetings, ....

#### Collaborations with:

- CU: Institute of Cognitive Science (ICS), Alliance for Technology, Learning, and Society (ATLAS), Coleman Institute, .....
- Other Universities: .....
- Outreach: City of Boulder, RTD, Campus Planning, Boulder Valley School District, Imagine!
- Industry: .....

### L<sup>3</sup>D's Research Focus and Intellectual Identity

 $\rightarrow$ 

- Artificial Intelligence (AI)
  - replacement
- instructionist learning
  - when the answer is known
- individual
  - access (GoogleEarth)
- generic
  - design
  - general
- "gift-wrapping" and "techno-determinism"

- $\rightarrow$  Intelligence Augmentation (IA) empowerment
- $\rightarrow$  constructionist learning
- $\rightarrow$  when the answer is not known
- $\rightarrow$  social (distributed intelligence)
- informed participation (EDC)  $\rightarrow$
- specific ("universe of one")  $\rightarrow$
- meta-design  $\rightarrow$
- customization, personalization  $\rightarrow$
- → co-evolution (new media; new theories) about working, learning, and collaborating; and new learning organizations)

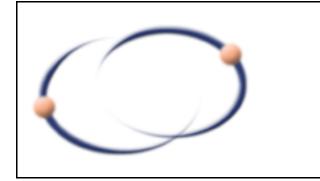
### Goals of the Meeting, August 3

- collaborative design by making all voices heard → Envisionment and Discovery Collaboratory
  - support for planning and decision making
  - focused on: social presence, sense of community, immersion
  - demonstration of a planning session
- human-centered public transportation systems of the future
  - information and communication technologies to take full advantage of complex transportation systems

# The Envisionment and Discovery Collaboratory



### **CLever** — a Current Major Research Project



"CLever: Cognitive Levers — Helping People Help Themselves"

- supported by the Coleman Institute, August 2000 July 2006
- http://l3d.cs.colorado.edu/clever/index.html

# **Our Objectives**

- doing basic research on real problems
- the future is not out there to be discovered (like Columbus discovered America) → it has to be invented and designed
- creating, supporting, and evolving a community (including all stakeholders: City of Boulder, CU, RTD, Fastrack, architectural firms, .....) to engage in a specific design task → development of Williams Village
- create "win-win" situations for all stakeholders
- to set a model for solving complex collaborative design task for the nation and the world
- "This is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning."— Winston Churchill