



MIT Media Laboratory

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Academic Head

Toshiba Professor of Media, Arts, Sciences



The Media Lab:

How people and machines can work together for expression, learning, creativity

Method:

Apprenticeship, not lectures

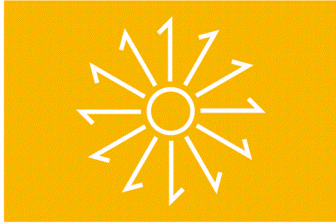
Invention, not description

190 Graduate Students

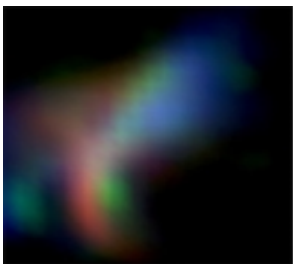
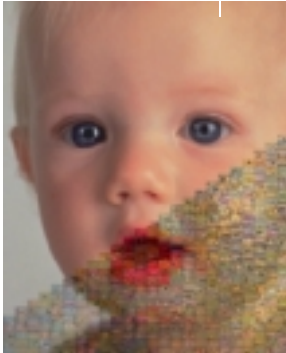
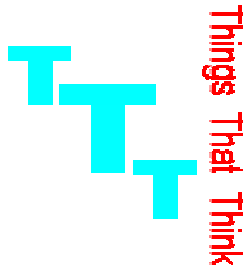
250 Undergraduates

180 Sponsors

D I G I T A L



N A T I O N S



Industrial Research Consortia (TTT, DL, NiF):

Precompetitive: we work on high-risk research

Highly leveraged: each member puts in small fraction of total cost

High-impact research: important research problems affect many different practical applications



Two Revolutions:

Communications

Sensors and Actuators





Economic disruption and opportunity

New players: the rules have changed



New: Digital Nations Consortium

Addressing major social challenges:

Learning and education

Health care

Community development

Sustainable development



A. Pentland, M. Resnick



Action Projects

Learning Hubs

LINCOS

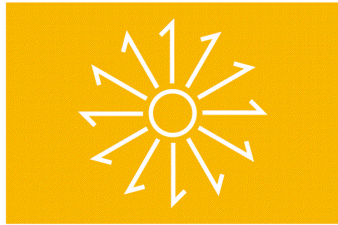
Computer Clubhouses

Silver Stringers

Museum Network



D I G I T A L



N A T I O N S

LINCOS

Little Intelligent Communities



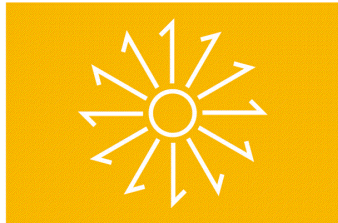
- **The basic design of this center consists of a tent-like tension structure covering a shipping container.**
- **The unit can be energy self-sufficient,**
- **It has a satellite link**
- **The container has a wide spread of integrated information technologies**



Foundation for Sustainable Development (JM Figueres)
MIT Media Laboratory (Alex Pentland)
Instituto Tecnológico de Costa Rica (A. Cruz)



D I G I T A L



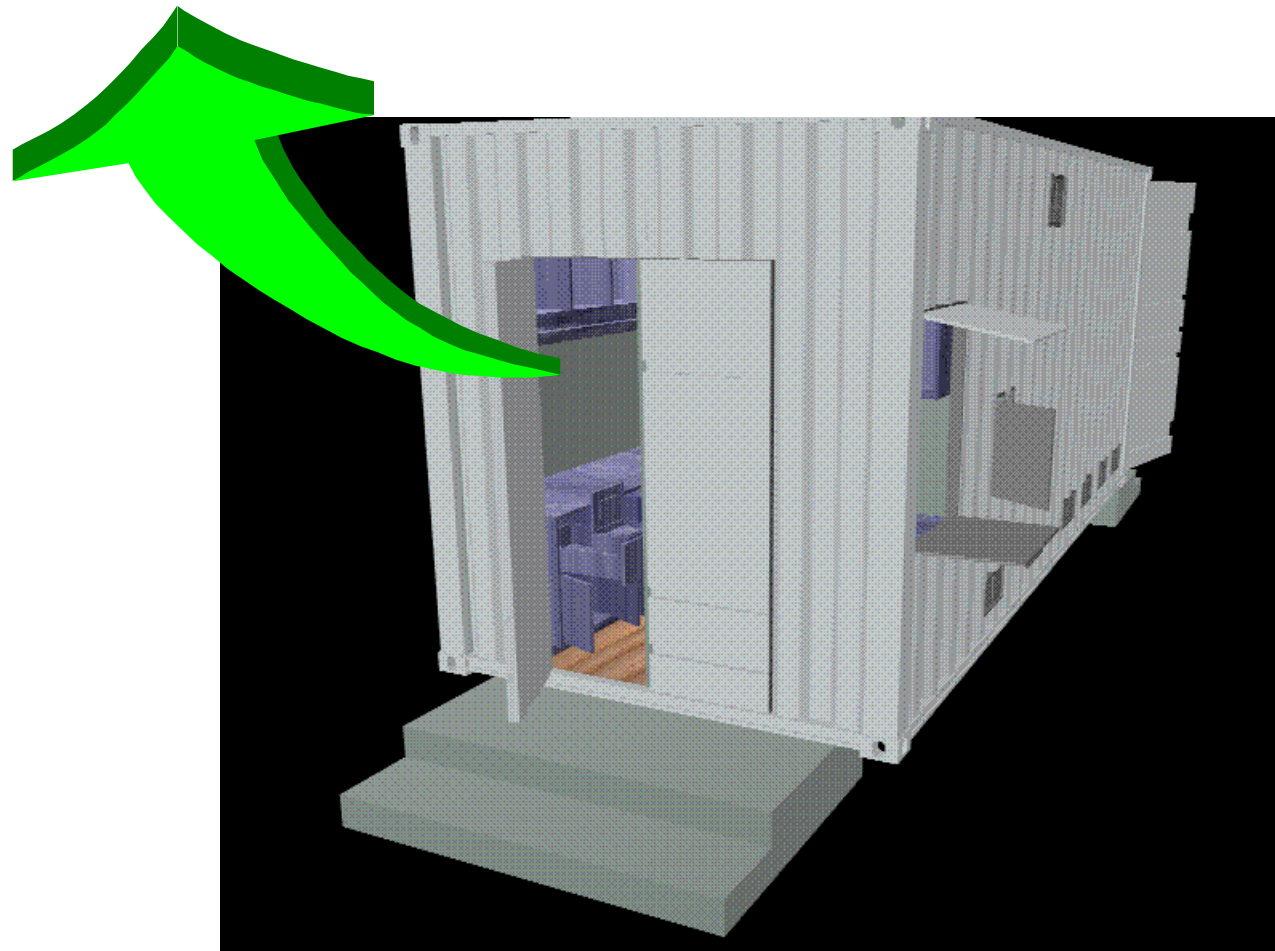
N A T I O N S

- **Health and Environment**
- **Education, training**
- **Videoconference**
- **Communications**
- **Information, E-services**

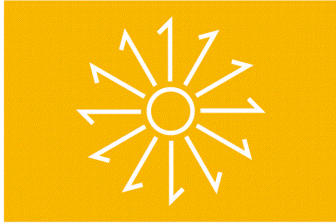




Health and Environment

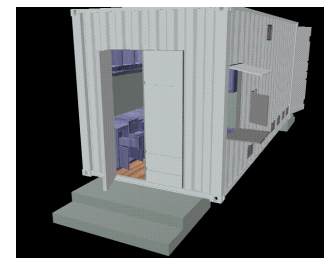


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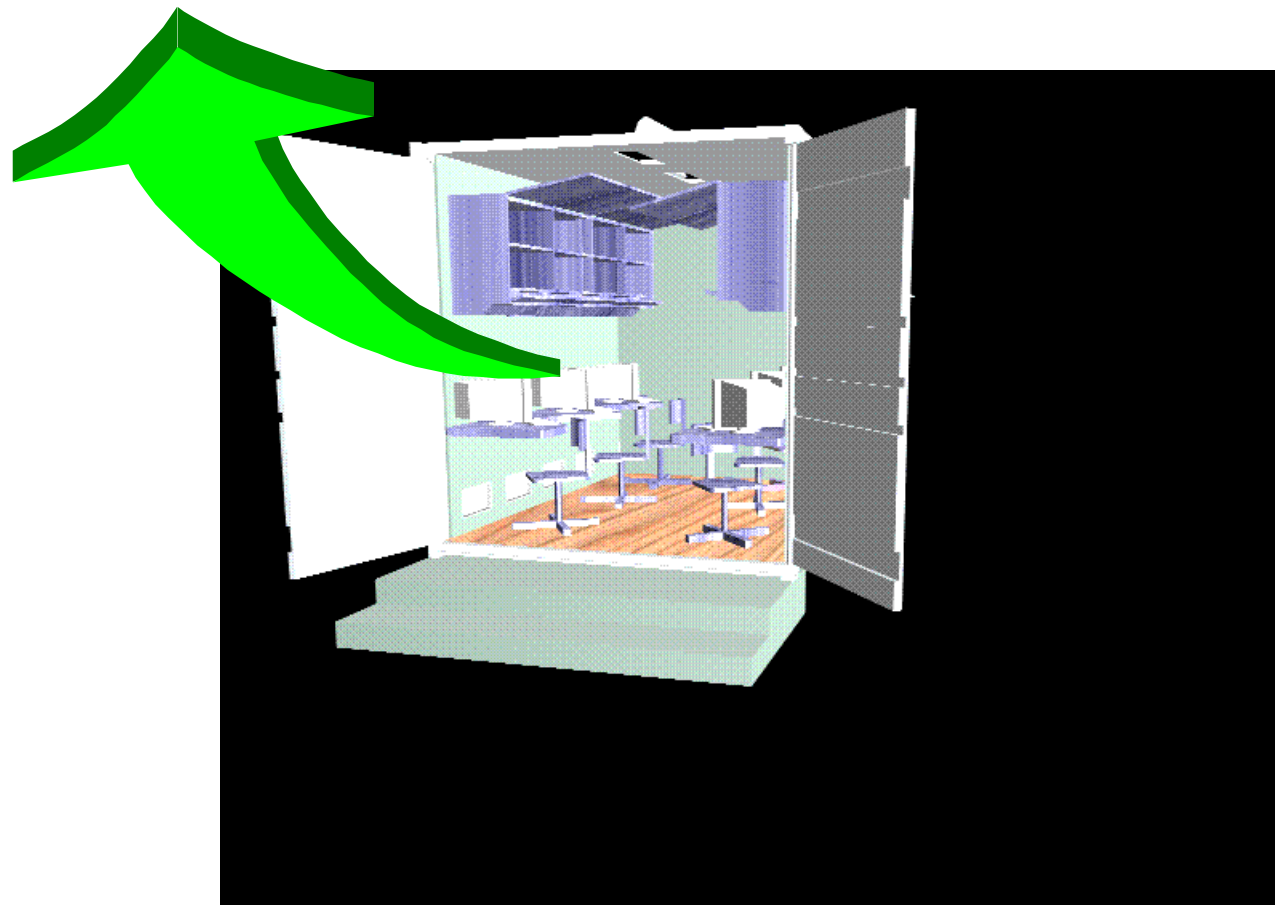
N A T I O N S

- **Telemedicine (EKG, Stethoscope ophtalmoscope, othoscope and dermoscope)**
- **Clinical analysis module**
- **Water analysis module**
- **Soil and forest module**
- **Metereological monitoring module**



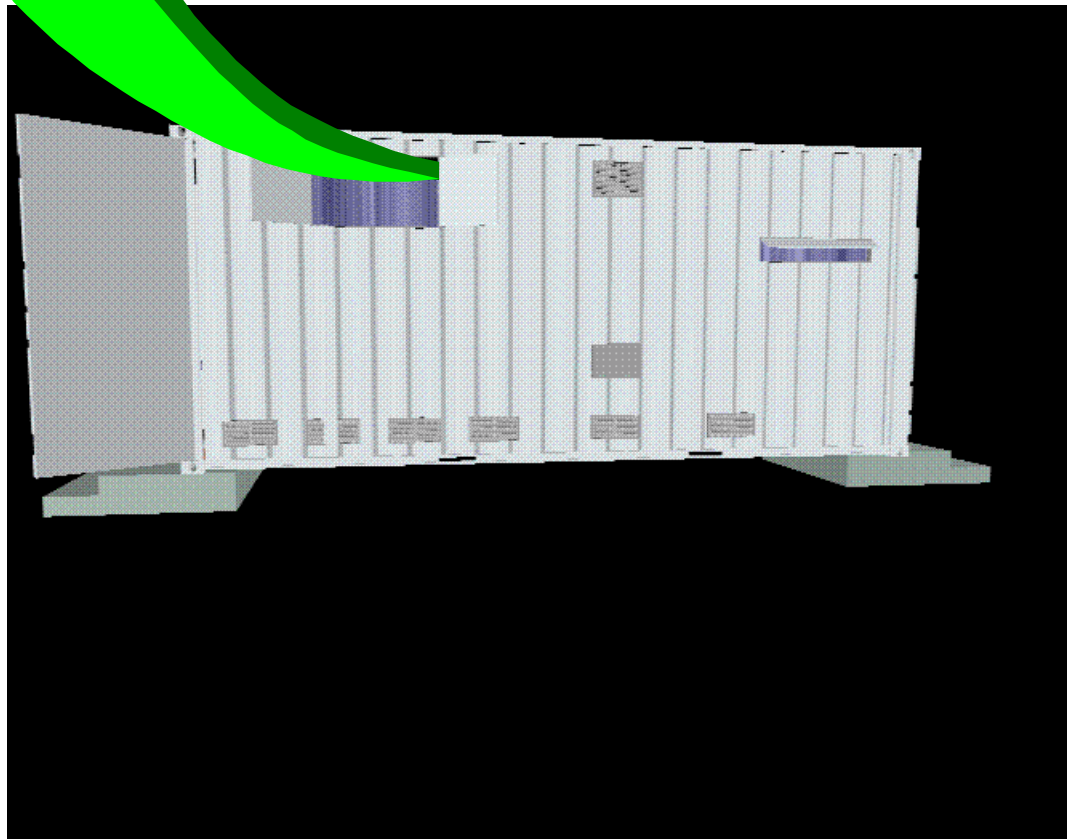
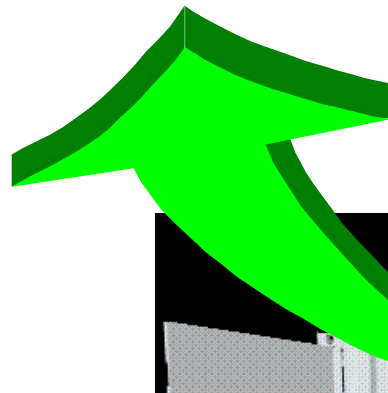


Training and Education Center



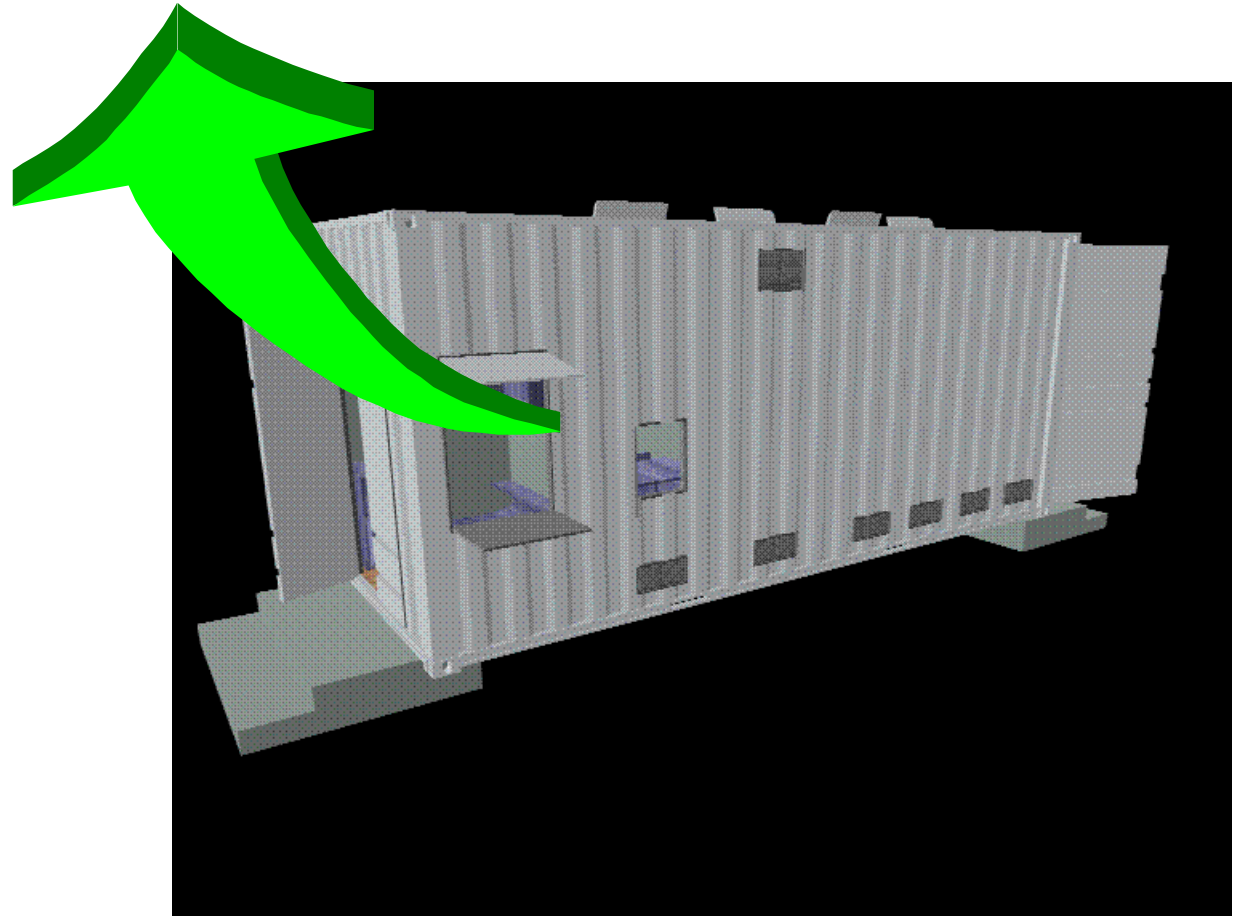


Video and Communications





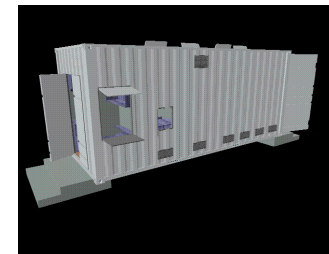
The Information Center





Since the management of the “center” requires one worker, we have combined these responsibilities with the running of the Information Center, which is a “one stop” information center that combines several community services:

- Runs the virtual library.
- Provides Fax/Copier services.
- Electronic commerce and banking.
- Manages an “E-mail post office”.

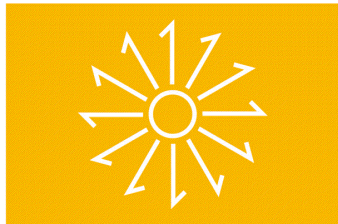




Sustainable: E-Market Models

The Modern Cooperative: agriculture and labor
Teleservices, in-country and international
Tourist Services

D I G I T A L



N A T I O N S

<http://www.media.mit.edu/unwired>

<http://www.media.mit.edu/dn>

<http://www.media.mit.edu/~pentland>