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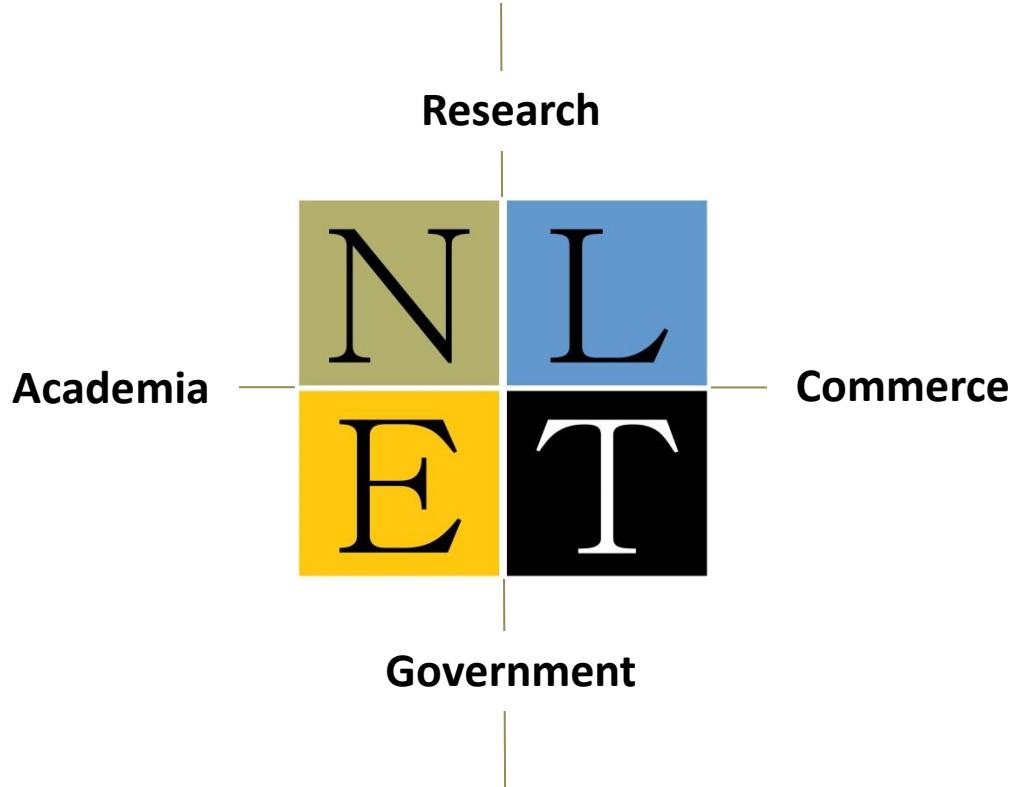
JI

IN

AN

“CROSS-SECTOR NON-PROFIT”

## National Laboratory for Education Transformation

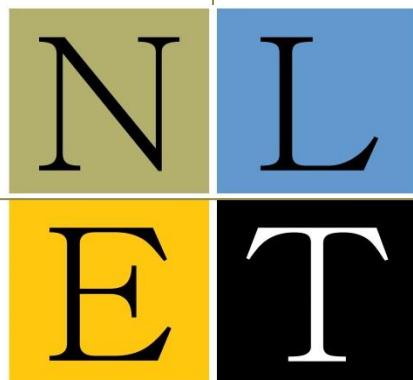


*Building the path of least resistance to the most knowledge possible  
for the most people possible by exploiting cross-sector collaborations*

# “MISSION : PARITY”

## What

Silicon Valley non-profit deeply dedicated to the future of learning using the best tools and methods available in any sector to promote systematic personalized learning



## Funding

National Science Foundation, National Institute of Standards and Technology, The Bill & Melinda Gates Foundation.

## Who

Memorandums of Understanding with:  
*University of California Santa Cruz; Los Alamos National Laboratory; University of Texas Austin.* UCSC + NLET = Center for Learning Architecture, Silicon Valley

## Focus

Personalization, learning accounts, multi-agency processing, redesigning math learning for the Common Core, redesign of workforce systems.

# “GENERAL SYSTEMS FOCUS”

## **PERSONALIZED LEARNING**

Through learner accounts & universal transcripts, where learner navigates all learning available via identity systems

## **INFRASTRUCTURE REDESIGN**

Design and R & D for smart, secure, data visualizing infrastructures for learning and training.

## DEVELOPING A CENTER FOR EDUCATION VISUALIZATION

## **INTER-AGENCY SYSTEMS**

For sharing, anonymizing, visualizing, critical data for learners, families & providing personal access

## **SKILLS ACQUISITION**

Combined with redesign of academic progression systems to know what to learn, measures and how to apply it in the workplace

# “APPLYING RESEARCH ”

## Individual/Accounts

**NSF DRK 12 – Agent-Based Modeling**

*UCSC, UT Austin, LANL, NLET*

## Regions/Access

**NSF BCC – Silicon Valley Regional Data Set**

*UCSC, NLET, Strive Together, Stewards for Change*

## Infrastructure/Security

**NIST NSTIC Trusted Identity Security**

*Resilient Networks, NLET, SAUSD, PVUSD*

## Economy/Signals

DEVELOPING A CENTER FOR EDUCATION VISUALIZATION

**Gates Foundation – Skills Network**

*NLET, CSW, Eduworks, Lone Star, KCTCS, Pima Community College*

# “THEORY OF ACTION”

## Post-Institutional Society

*Pro-Individual, Information Services*

## Stubbornly-Institutional Systems

*Hierarchical, Administrative State*

Individual  
Accounts

Infrastructure  
Security

Personal

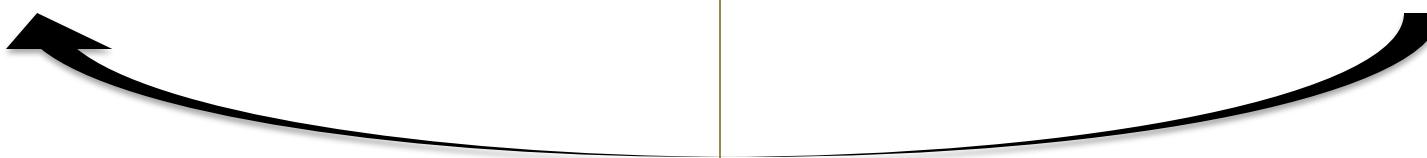
Informational

Regions  
Access

Workforce  
Signals

Organizational

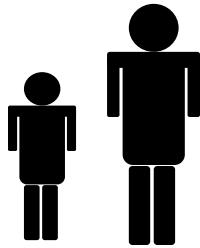
Economy



*To move across the digital divide requires more than technology;  
patience, collaboration, interest-sharing and proof are necessary*

# "AREAS OF R & D "

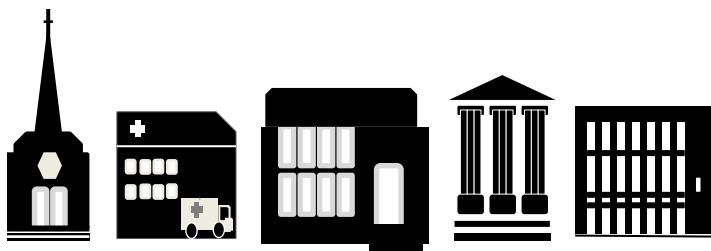
**Individual/Accounts**



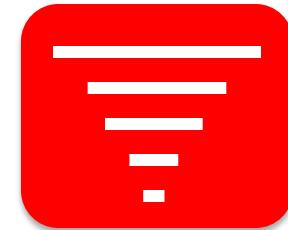
**Infrastructure/Security**



**Regions/Access**



**Economy/Signaling**



**DATA**

*Research  
Standards  
Governance  
Business-Models  
Service & Privacy*

# "PARTNERING WITH EXPERTISE"

**Individual/Accounts**



**Infrastructure/Security**



**Regions/Access**



**Economy/Signaling**



# “REGIONAL PROBLEM FOCUS

## Individual/Accounts

**NSF DRK 12 – Agent-Based Modeling**

*UCSC, UT Austin, LANL, NLET*

## Infrastructure/Security

**NIST NSTIC Trusted Identity Security**

*Resilient Networks, NLET, SAUSD, PVUSD*

## DATA

*Service & Privacy  
Governance  
Business-Models  
Standards  
Research*

## Regions/Access

**NSF BCC – Silicon Valley Regional Data Set**

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## Economy/Signals

**Gates Foundation – Skills Network**

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## Consumer / Enterprise Sector

- Web Systems
- App Markets
- Smart Systems
- Big Data
- Identity Systems
- Social Media
- Data-Mining

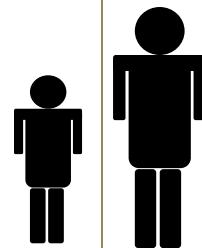
***N = 1***

***N = all***

## Social / Education Sector

- Education
- Training
- Social Services
- Juvenile Justice
- Health Services
- Police
- Workforce

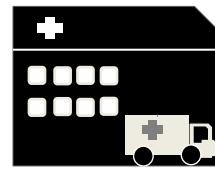
***N = some***



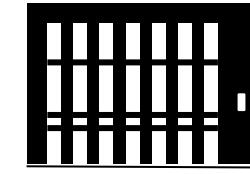
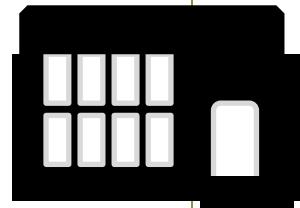
*NLET’s goal is for n=1 / n=all to drive the learning and training worlds so that how we enable individuals is informed by common data.*

*"N = SOME"*

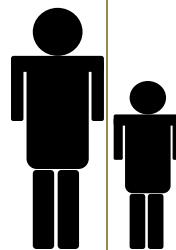
## Regions/Access



**Many Accounts**



*N = some*

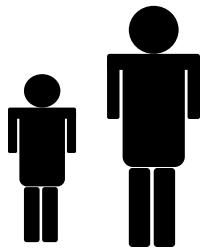


**DATA**

**Separate Data Stacks**  
**No Agreements**  
**School-Agency Split**  
**No Standards**

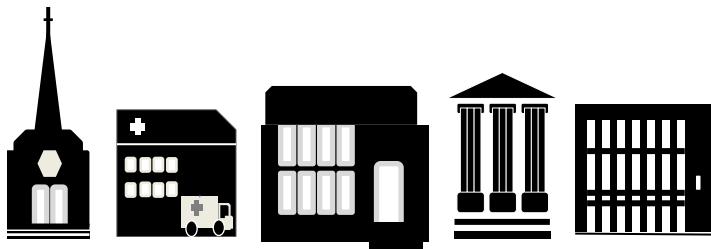
# “COMMON STRATEGY & STANDARDS”

Individual/Accounts



***N = 1***

Regions/Access



***N = some***

Infrastructure/Security



***N = all***

Economy/Signals



**DATA**  
*Service & Privacy  
Governance  
Business-Models  
Standards  
Research*

# “SMART SECURE SERVICES”

Individual/Accounts

Infrastructure/Security

Privacy

Protection

Regions/Access

Economy/Signals

## DATA

*Service & Privacy  
Governance  
Business-Models  
Standards  
Research*

Service

Learning

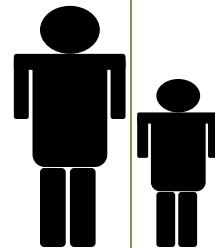


$N = 1$

## Individual/Accounts



**One Account**

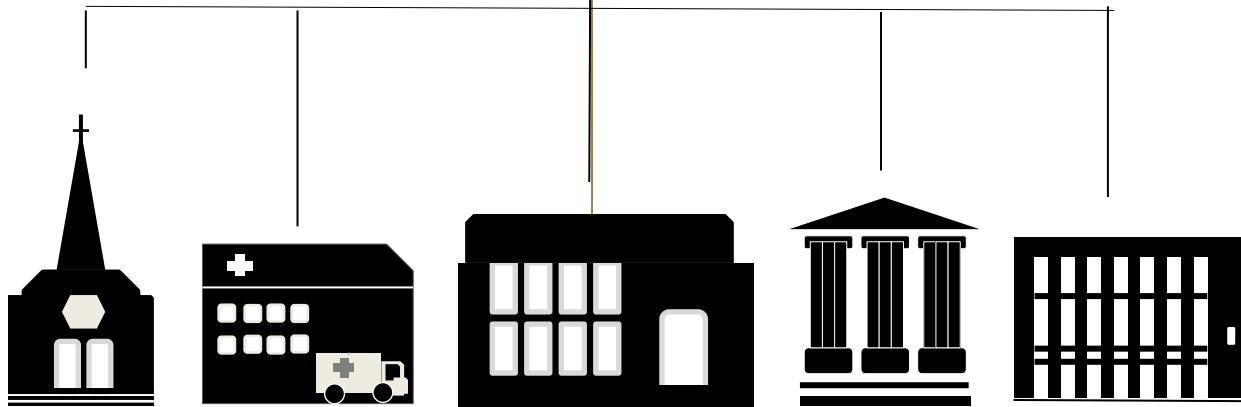


**DATA**

*Service & Privacy*

*Governance  
Business-Models  
Standards  
Research*

**Regional Data  
Trust**



*"N = ALL"*

## Data Trust / Concept

### TRUST ADMINISTRATION

LEGAL STRUCTURE

GOVERNANCE

BUSINESS RULES

DATA AGREEMENTS

**Regional Data  
Trust**

DATA ARCHITECTURE

DATA STANDARDS

DATA COMPLIANCE

DATA STORAGE

DATA AUDIT

### DATA TRUST OPERATIONS

ACCESS STRUCTURE

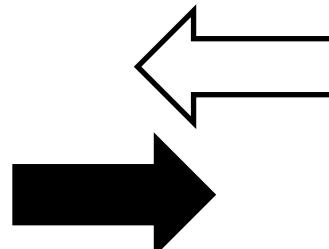
ACCESS REGISTRY

ACCESS SYSTEM

ACCESS ACCOUNTS

ACCESS AUDIT

### DATA TRUST ACCESS



# “SECURE DATA & IDENTITY INFRASTRUCTUE

## Individual/Accounts

Secure Individual or Family Learning Account, Transcribes School and Other Learning & Certification

## Infrastructure/Security

Tie into standards-based trust-protected infrastructure (cloud & local) that interacts inside & outside school

## Regional Data Trust

## Regions/Access

Schools & social, health, criminal agencies have data access on common file system to agencies, schools & home

## Economy/Signals

Services flow seamlessly to each learner & family accessing institutional & outside points of

# “CENTER FOR LEARNING ARCHITECTURE”



UCSC

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“NEXT”

DEVELOPING  
A CENTER FOR  
EDUCATION  
VISUALIZATION