What kind of things are worthwhile learning?

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Learning (Constructionism)

• Knowledge is constructed (Piaget / Paper)
• Powerful ideas vs. Facts
• Interaction/Collaboration with peers
• Formal, Informal and Non-formal spaces
• Tools (Technological fluency)
  – Low floor, High ceiling
  – Wide walls
Learning...

Technological Fluency

Creativity

Problem solving

Debugging
What we have done

• Build capacity of learning teams

• Develop regional communities
  – Central America (Costa Rica, Nicaragua, El Salvador, Honduras, and Guatemala)

• Develop a number of strategies to make learning visible
Community building

Spanish Chat

El equipo de aprendizaje de OLPC ofrece un chat en Español para intercambiar experiencias de aprendizaje desde los diferentes proyectos. En esta página se registra información acerca de los chats en Español durante los meses de Mayo a Diciembre de 2010, incluyendo una transcripción de los mismos. Para los chats de 2011 entrar a Chat en Español 2011. También existe un foro en español que sirve para continuar discutiendo temas de interés que no se concluyen durante el chat, o para aquellos que se pierden el Chat de la semana puedan participar igual.

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Innovation in Evaluation

• Micro level ➔ Student/Teacher/(Parents)

• Mezzo level ➔ Teacher/Principals/Stakeholders

• Meta level ➔ Nation/Across nations
Meta data

http://wiki.laptop.org/go/Datos_diario
Micro level: Student

To help students and teachers (parents) understand emerging learning and progress at any given time:

- Personal
- Changes student/teacher dynamic
- Reflection
Micro level: Journal and Portfolio
Portfolio: Student, Nigeria

A Human

Wow on this great day, I made a human being using the turtle art activity
Portfolio: Teacher in Nigeria

security alert using turtle arts, learned more things in turtle arts and got more idea about using the sensor blocks in turtle arts. This can help our kids to develop their reasoning level and creativity.
Portafolio: Teacher in Nigeria

Wild animals

A memorize activity, wild animals. This activity matches pictures of animals with their names. Children can use this to identify animals and names. The name of each animal is pronounced as the picture is clicked.
Mezzo level: Classroom/School

To understand learning in the classroom/school, as well as development of the program:

• Immediate results
• Informs teacher about students’ learning
Mezzo level: Real time strategies

“Hacia un sistema de evaluación de aprendizajes en línea”
Andres Peri
ANEPCODICEN (Uruguay)
Server infrastructure
Teacher’s experience

- Content
  - Lessons
  - Books
  - Media archives
- Backup & restore
- Network
- Identity & Security
Macro Level: Nation/Across Nations

To understand impact at the level of program (nation, state, community) and across nations:

• Understand differences and similarities
• Learn about emergent developments
• Allows innovation at the mid-scale with projections at scale
Innovations at middle scale

1. Paraguay Educa in Paraguay (9k)
   – 9,000 in the city of Caacupé

2. Edücate program in Vichada Colombia:
   – 700 children in 11 schools
Macro Level: Scratch, as example

“Logo has a nice grammar, but no literature.”
Marvin Minsky 1986
Scratch: statistics

Who We Are
- Daily Visitors
- Location of Visitors
- New Users Per Month
- Age of Users

What We Do
- Activity Per Month
- Scratch Blocks Usage
- Project Creators
- Comment Posters

Who Makes What
- Scratch Activity By Age
- Project Creation Behavior
- Comment Posting Behavior

COMING SOON!
Visualization techniques
Visualization techniques

The length of the bars indicate the number of projects from that location. The ip-address to latitude/longitude database is not super accurate. This was inspired by a Google visualization of search volume in different languages from around the world.
One possible
Conclusions

• OLPC is an initiative driven by learning
• OLPC initiatives are certainly a laboratory where many aspects of scale can be integrated and studied
• Evaluation strategies have implications in all aspects of the programs (learning/teaching, content development, etc.):
  – Micro: student (Journal)
  – Mezzo: Teacher/student (Server)
  – Macro: Programs/across nations (Global repository)
Thanks!