

one
laptop
per
child

1



What kind of things are worthwhile learning?

Claudia Urrea, PhD
Community Summit 2011
San Francisco, CA
October 23, 2011



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

Think about
think

Problem solve





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 Espanol 2011](#). También existe [un foro en español](#) que sirve para continuar discutiendo temas de interes 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

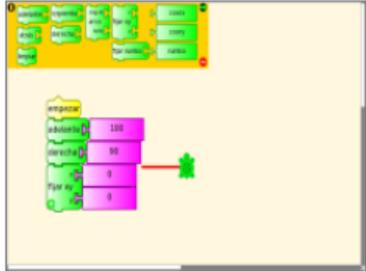


Meta data



⏪ Atrás

☆  Turtle Art Activity Segundos atrás



Tipo: application/x-turtle-art
Fecha: 20/10/11
Tamaño: 377 B

Descripción:

Etiquetas:

Activity Data:

Iteracciones: 1
Bloques de la Tortuga: empezar adelante derecha fijar xy

Participantes:

http://wiki.laptop.org/go/Datos_diario



Micro level: Student

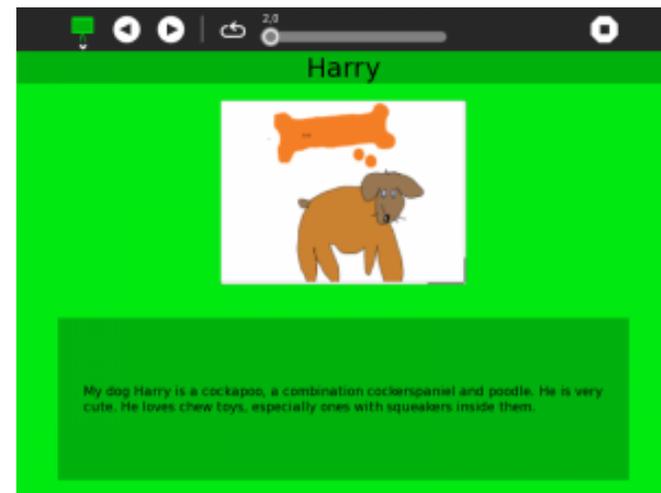
To help students and teachers (parents) understand emerging learning and progress at any given time:

- Personal
- Changes student/teacher dynamic
- Reflection

Micro level: Journal and Portfolio



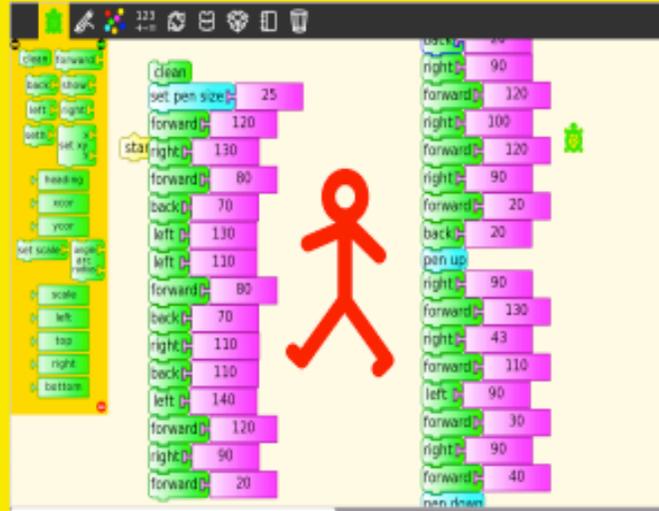
What	Who	When
The Tortoise and the Hare	✕ ✕	2 minutes ago
Russian Tortoise - Wikipedia, ...edia	✕ ✕	5 minutes ago
A photo of my cat	✕ ✕	yesterday
This fantastic story about ... wrote	✕ ✕ ✕	yesterday
Image clipping	✕ ✕	yesterday
Our school	✕ ✕	2 days ago
A movie of my family	✕ ✕	3 days ago
Uruguay - Wikipedia, the free...pedia	✕ ✕	1 week ago
History of Uruguay	✕ ✕ ✕	1 week ago
My homework assignment	✕ ✕	1 week ago



Portfolio: Student, Nigeria



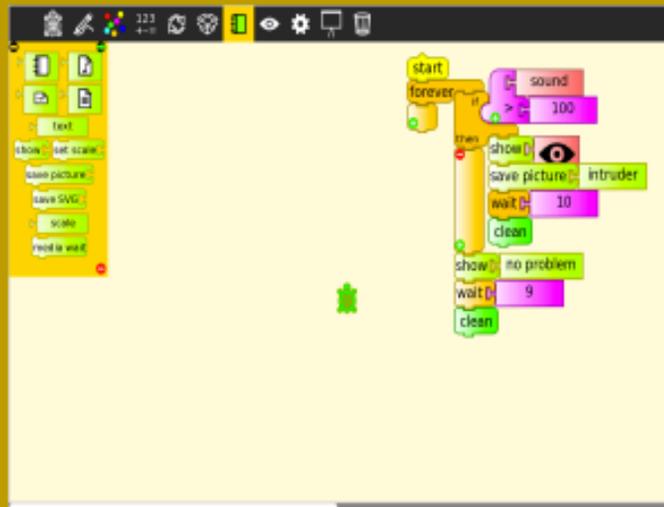
A Human



Wow on this great day, I made a human being using the turtle art activity

Portfolio: Teacher in Nigeria

Turtle Art Activity



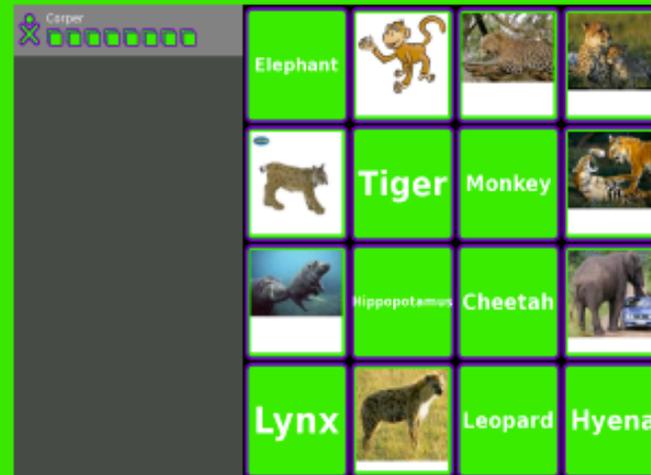
security alert using turtle arts. learned more things in turtle arts and got more idea about using the sensor blocks in turtle arts. this can help our kids to develop their reasoning level and creativity.



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
 ANEP CODICEN (Uruguay)



ANÁLISIS DE RESULTADOS INDIVIDUALES

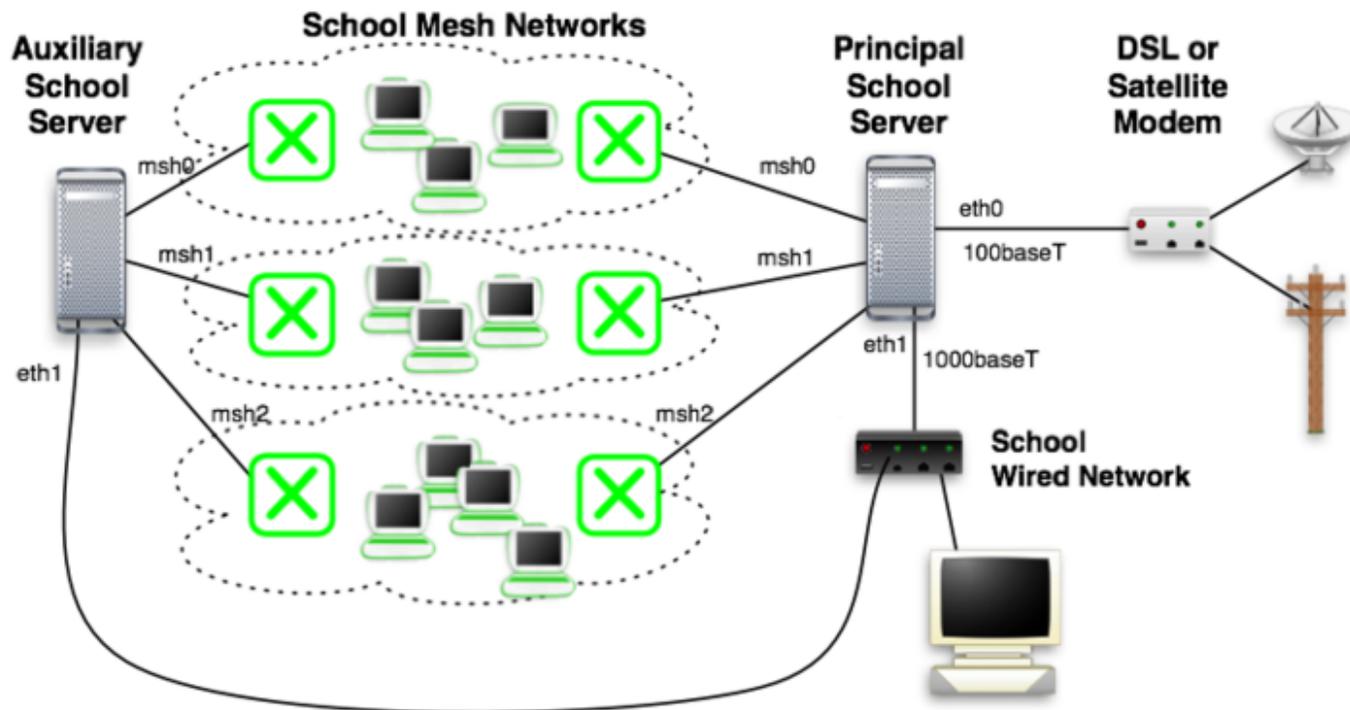
Centro: Escuela Nº 598
 Grupo: 2º B
 Departamento: MONTEVIDEO
 Asignatura: Matemáticas
 Prueba: 2º Matemáticas
 Contenido: Todos

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LUCÍA BELEN RIVERA LÓPEZ	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BELEN PICCOLO ALFARO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ANA PAULA NUSSPAIMER AGUI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LUCÍA ANTONELLA GROSSO MELO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AGUSTINA DAUSON BURGUEZ	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NICOLE SELENA CORTI RODRIGUEZ	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SIBIENA RODRIGUEZ ARRU	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SOFÍA PELOSI FAGOAGA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AGUSTINA COELHO DE LOS S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DAIANA SUSANITA ABAJO FERNÁNDEZ	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VIRGINIA GARCÓN SELAVI IRIGOYEN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PAMELA TAMARA ITORRIBURO VIECIE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VICTORIA BELEN VINCON CARTIER	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SELENA MARTINEA MARTÍN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FEDERICO RICARDO PICHIEL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MATÍAS LÓPEZ PEDMONTE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NICOLÁS MANUEL MOURO SOSA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ADRIANO MAIO LONGO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CAMILLO OTTONELLO VIERA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IVÁN LÓPEZ SALAVERRY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FEDERICO MATTONI GONZÁLEZ	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NICOLÁS AGUSTÍ MONGELOS TECCO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ARISTÓTELES GAS TZITZIOS CAMAÑO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AGUSTÍN NICOLÁS PÉREZ FERRARI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



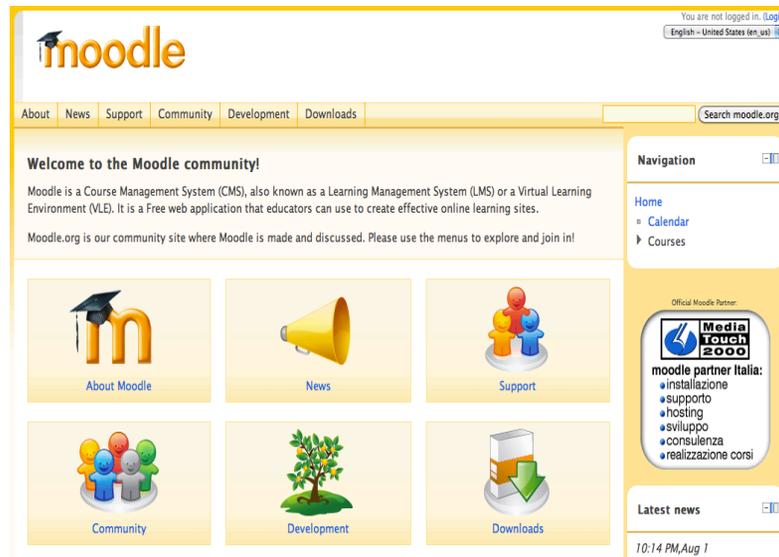
one laptop per child

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. Educate program in Vichada Colombia:
 - 700 children in 11 schools



Macro Level: Scratch, as example

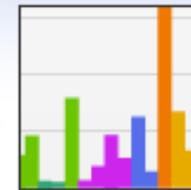
“Logo has a nice grammar, but no literature.”

Marvin Minsky 1986



The screenshot shows the Scratch website interface. At the top, there is a navigation menu with links for home, projects, galleries, support, forums, about, my stuff, and Language. Below the menu, there is a search bar and a message notification: "You have 20 messages". The main content area is divided into several sections: "Newest Projects" featuring "Axis won WW2", "Moon", and "shoot2"; "Featured Projects" featuring "Mountain Dogs P...", "Geyser simulation", and "Robotcou Stage1"; "Scratch Day" with a cat icon and text about worldwide gatherings; "Scratcher Interviews" with a text icon and text about sharing experiences; and "ScratchEd" with a laptop icon and text about helping people learn Scratch. Each section includes a "See more" link.

Community Stats



795,147 registered members,
229,870 project creators,
1,781,747 projects.
That's a lot of

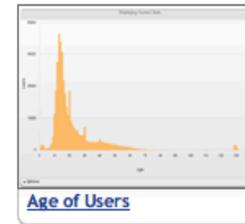
Scratch-ing!



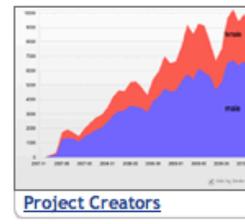
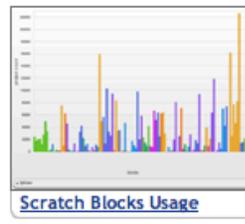
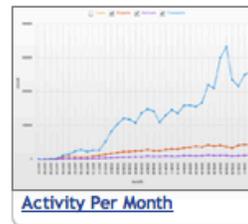


Scratch: statistics

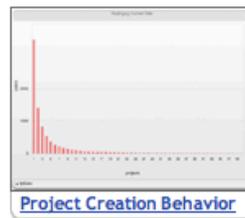
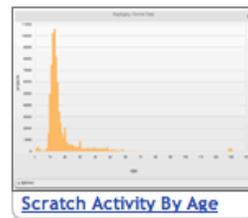
Who We Are



What We Do



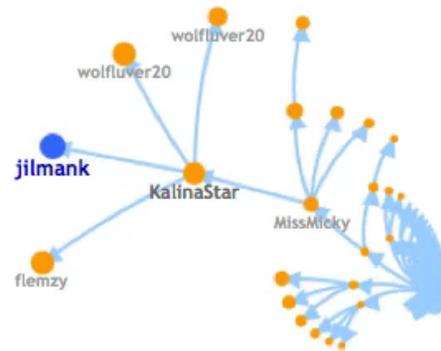
Who Makes What



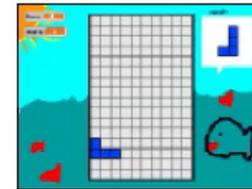
Visualization techniques



Remix Visualization

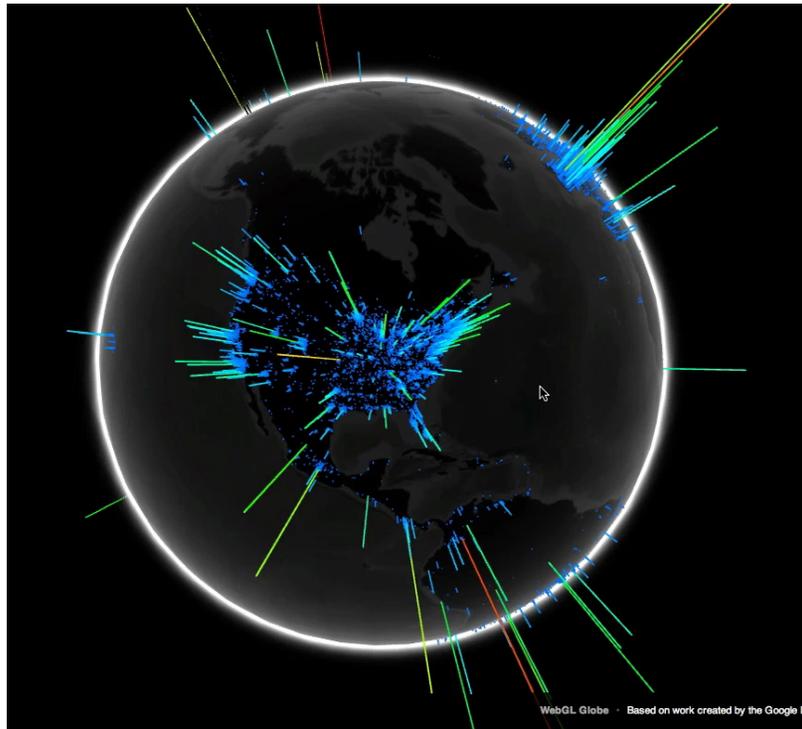


Jilmank Tetris!



 [jilmank](#)
Based on [KalinaStar's project](#)

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



Perfil



Buscar usuario

Dayana Karina Arguello Rodriguez [Editar perfil](#)

Fecha de nacimiento
Septiembre 25 de 1997

Colegio
Instituto El Gran Saber

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8-1

Correo electrónico
dayanaarguello@hotmail.com

Grupos o asociaciones a los que perteneces

Hobbies
pibull

Deportes
baloncesto

Mis productos mas recientes

☆  Registering	1 hora, 56 minutos ...
☆  Resource one	3 semanas atrás
☆  My first entry on Wiki	3 semanas atrás
☆  Me and my friend	3 semanas atrás
☆  My classroom	4 semanas, 1 día atr...

Estadísticas

Recursos creados : 5638
Recursos visitados : 2146
Cursos activos : 9
Cursos finalizados : 0
Preguntas formuladas : 0
Preguntas resueltas : 0

Portafolio

es loque le dan en cl...
29 Visitas

doble y medio

Comunicacion desde el Journal



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!

