

Open User Scheme (WP 7)



Ulrich Hoppe
COLLIDE / IIIS
University of Duisburg-Essen

Marcelo Milrad
MSI / CELEKT
Växjö University

Community building and dissemination



COLDEX WP 7 -

Open User Scheme

General goal:

- Forming a sustainable trans-continental user community involving educational institutions in Latin America and Europe

Means:

- Subscription format (-> access to COLDEX LOR)
- Provision of material in Spanish and English
- Organisation of workshops

OUS resources



about 50 kEuro (of 79 kEuro in other.spec.proj.costs) allocated for supporting workshop organisation/participation

- > make the participation fee low
- > support key multipliers without own resources

OUS workshop



- Held in Buenos Aires (Argentina),
May 10-11, 2004
- Host: ORT school
- 25 participants
from 11 institutions



Participant institutions



Argentina:

- Fundación ORT
- Universidad de Luján,
sede Chivilcoy
- Universidades de Rosario,
Santiago del Estero

Paraguay:

- Colegio Goethe / OMAPA

Brazil:

- Universidad Lutherana
de Brazil (Porto Alegre)

Chile:

- ENLACES / Univ. de Chile
- Univ. Católica Santiago

Colombia:

- Universidad Pedagógica
Nacional (Bogotá)
- Gobernación de Cundinamarca

Venezuela:

- Universidad Pedagógica
Estatal "Libertador"
(Maracay)

UPEL, Venezuela



www.upel.edu.ve

Institución: U.P.E. Libertador, Venezuela

Personas: Freddy
(sede Maracay)

60.000 estud.
maestros
profesores



CAR-

Proyectos / actividades: educación matemática

grupo de investigación →
formación de profesores

Necesidades: "alma mater", bibl. virtual

formación para el uso
de TICs
actualización de equipamiento

Aportes: creación de un lab. experimental multidiscipl.

- geometría dinámica
- "neuro didáctica" (tareas intelectualmente exigentes)
- educación emocional - cognitiva

Depto. Cundinamarca



Institución: Secret. de Ed., Cundinamarca

Personas: Neri, Cristina

≈ 3.500 escuelas



Proyectos / actividades:

"Computadores para educar" (Ministerio Nacional)
interdisciplinario, 15 comp. por colegio
capacitación en las escuelas

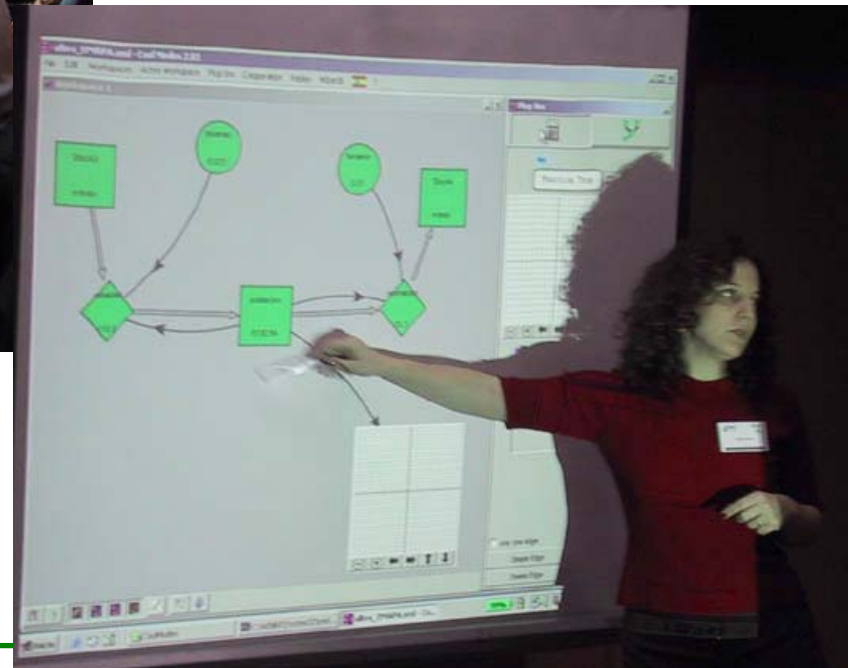
Necesidades:

metodología de trabajo colaborativo
en ciencias en "aulas mixtas" (un ambiente por escuela-nivel)

Aportes: apoyo político - financiero

robots LEGO (RCX)

Hands-on work + reporting



Participant interests



- Mathematics (teacher) education
 - > scenarios "lunar cartography", probabilities
- Environmental studies
 - > biodiversity scenario, System Dynamics
- Technology
 - > robot in a maze



Follow-up activities



- Creation of an archive and mailing list
- Call for Coop. Project Proposals (CPPs) (end of July, expected mid Sept.)
- Visit to Colombia
- CPP selection (by end of Sept.)
- October-January: CPP activities
- Beg. of March 2005: 2nd workshop

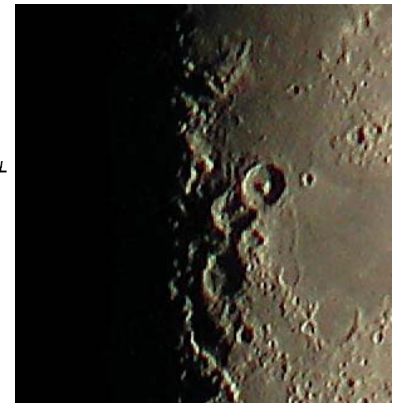
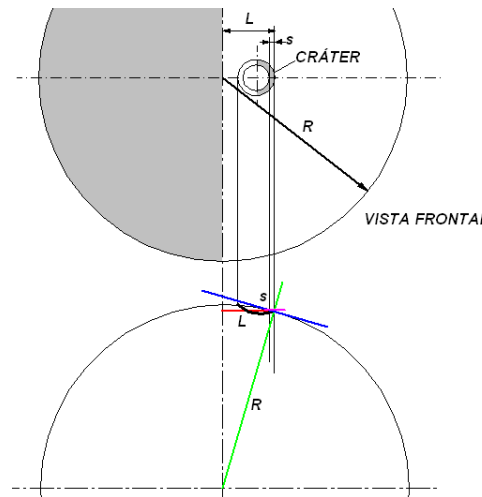
Colegio Tecnológico Madrid



Project „Alturas Lunares“



- Classroom project on calculating crater depths on the moon
- Composed of a 4 hour lesson in 10th grade with 30 students
- Aims: individual and collaborative work with CoolModes
- Location:
Colegio Rodrigo Lara
Bonilla, Colombia



Conclusions



- students were able to calculate moon heights
 - knowledge of basic trigonometry necessary
 - collaborative work very effective
 - sharing knowledge and helping each other
 - software considered interesting, allows various mathematical operations
 - could be applied in for other calculations (e.g. planet diameters, distances etc.)
-

Project „Probabilidades“



- Topic: probability calculations with CoolModes
- Aims: learning mathematical concepts in applying new technologies for individual and collaborative work
- Location:
Colegio Nocturno,
Sur de Bogotá, Colombia



Conclusions



- coolModes is interesting and entertaining
- mathematics becomes more interesting
- supports motivation
- after a short orientation and trial phase the relations between components and their meaning was correctly interpreted and used
- group work facilitated understanding of the software



Other activities



Argentina:

- invited speaker at the V International Symposium of Mathematics Education, Chivilcoy, May 5-8, 2003 (M. Milrad)
- invited speakers at the VI International Symposium of Mathematics Education, Chivilcoy, Sept. 6-8, 2004 (M. Milrad, U. Hoppe)

Colombia:

- "Cátedra ICFES", Bogotá (U. Hoppe, 11/2002)
- teacher course U. Valle, Cali (U. Hoppe, 12/2002)
- presentation at Univ. Ped. Nacional, Bogotá (U. Hoppe, 8/2004)

Paraguay:

- invited speaker at the WME 03, Asunción, May 12-14, 2003 (M. Milrad)