

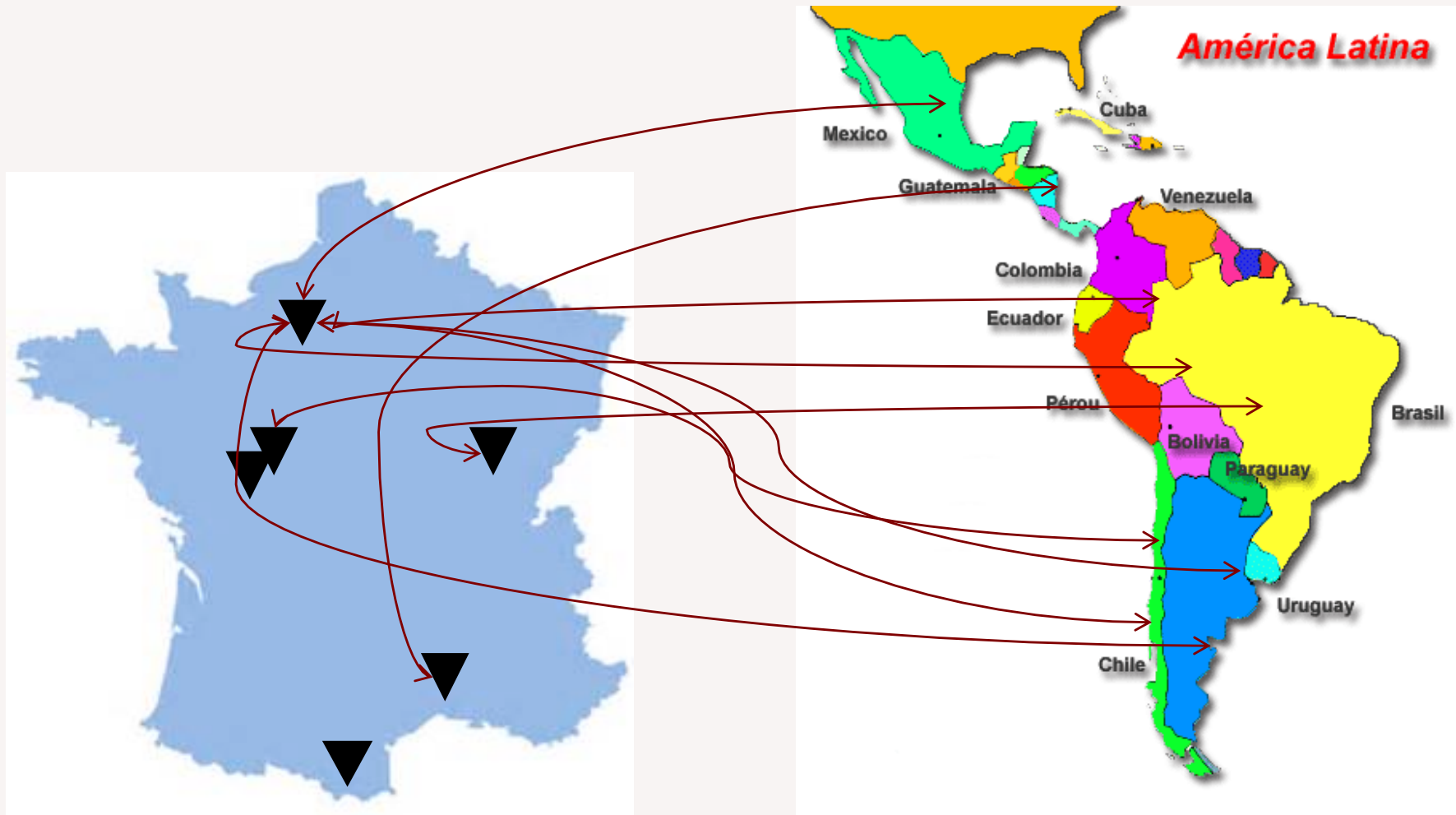


Didactic interactions between France and Latin-America. The case of Mexico

Avenilde Romo y Francois Pluinage

Currently

France and Latino America



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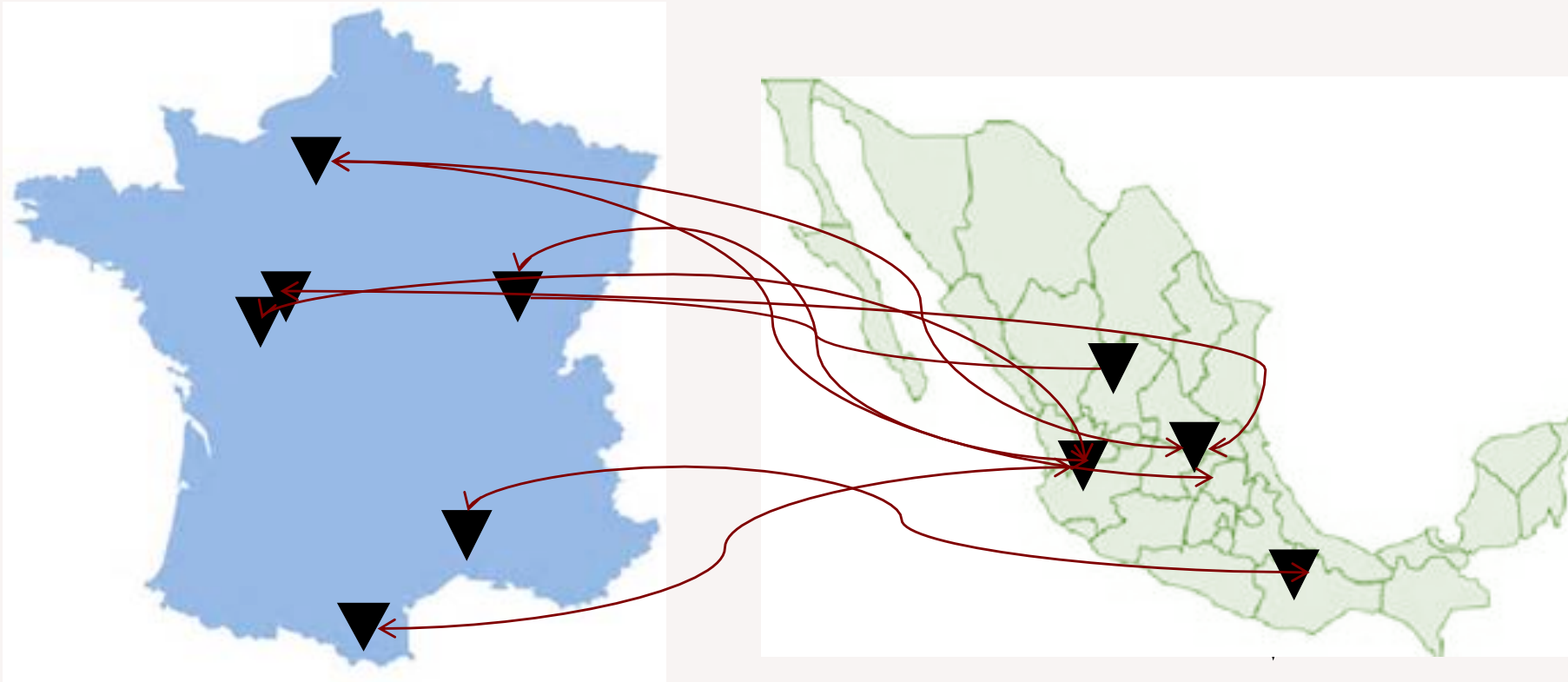


Currently

Universidades de Grenoble,
Lille, Montpellier, Paris, Rouen,
Strasbourg y los IREMS, ESPE e
IFE

France and Mexico

DME CINVESTAV
DIE CINVESTAV
CICATA – IPN
Tecnológico de Monterrey
Universidad Autónoma de Guerrero
Universidad de Guadalajara
Universidad de Zacatecas



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Didactic interactions between France and Mexico
have involved different institutions, themes, theories,
methodologies and researchers



ICME13
Hamburg 2016

Center for Advanced Research and Studies



Department of Mathematics [Education](#)

Department of Educational Research

JULY 2016

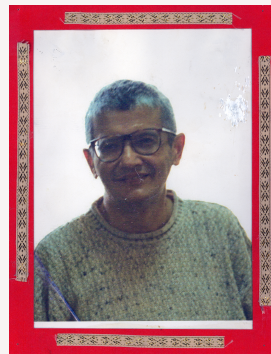
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Department for Mathematics Education



1975 Eugenio Filloy and Carlos Imaz



Jesús Alarcón (nickname Papini) and Fernando Hitt, went to Strasbourg to study their doctoral degrees



Research that focuses on random phenomena and probability

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- DME's inclusion in the *National Register of Quality Graduate Programs (PNPC)*
- **Research** about the rational numbers, in algebra, probability, functions.
- **Frameworks:** epistemology, cognition sciences, socio-cultural theories of learning
- **Participation in Congresses:** ICME, CIEAEM, PME, PME – NA, RELME, Iberoamérica, etc.
- International status of the journal Relime



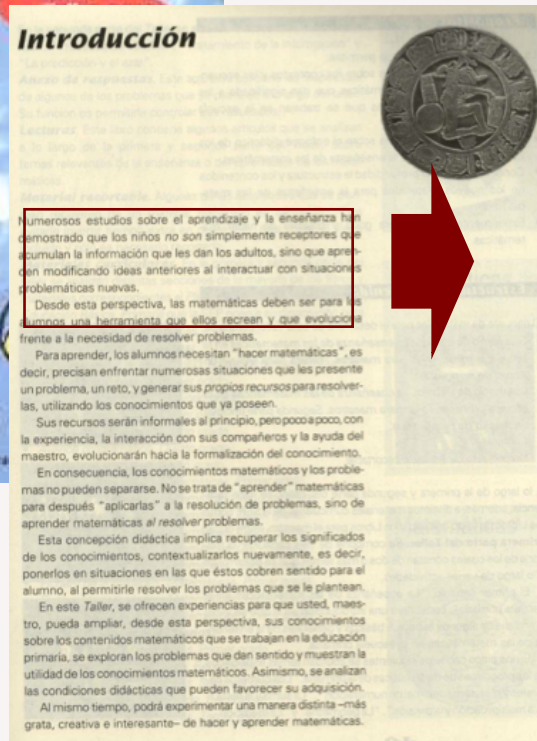
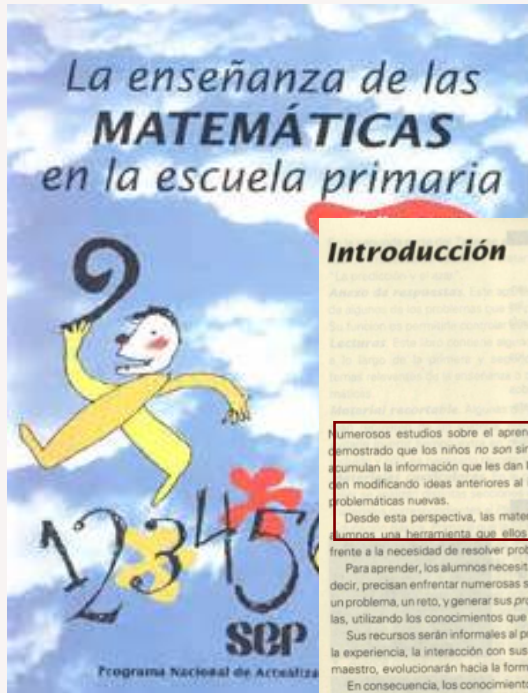
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Department of Educational Research - TSD

- Curricular reform 1993
- Program for Actualizing Mathematics Teachers 1995



Numerous studies of teaching and learning demonstrate that children *are not* simple receptors who accumulate information given by adults, but that **they learn by modifying previous ideas through interaction with new problematic situations.** In this perspective, math should be a tool that students use to re-create and evolve when faced with the need to solve problems



Center in Applied Science and Advanced Technology

- In 2000, the Center in Applied Science and Advanced Technology created On-line Programs for Mathematics Education (PROME) at the Master's and Doctorate levels for math
- Some of the students currently enrolled come from such Latin American countries as Argentina, Chile, Colombia and Uruguay

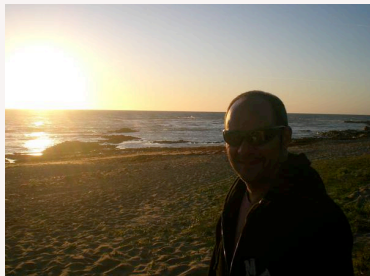


Learning units in collaboration

The ‘learning units’ (LU) on which the programs are based have been designed with aim of building a bridge between research in mathematics education and teaching practice



Online resources to learning mathematics at university level ‘e-math’ platform



Resources by and for math teachers (2013)



The role of language in math activities (2015)

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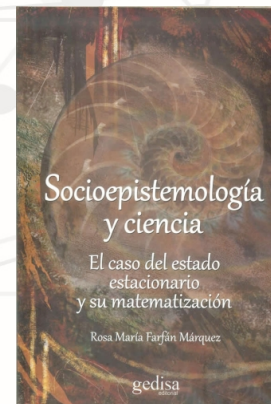
Currents originating in Latin America

Ethnomathematics



Socioepistemology

Created by a research group led by Ricardo Cantoral. Its main focus is the social construction of mathematical knowledge.



Some perspectives

- Differential and integral calculus: a seminar and annual meeting with participation by French researchers, invited speakers and workshop organizers that offers spaces for new collaborations
- Design of Study and Research Paths for training future technicians and professionals that set out from analyses of professional contexts, in collaboration with Latin American, French and Spanish researchers
- Studies of complementarity between the socioepistemological and ATD theories by Latin American and French researchers

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THANK YOU



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