



Ministerio de Ciencia,  
Tecnología e Innovación Productiva  
**Presidencia de la Nación**



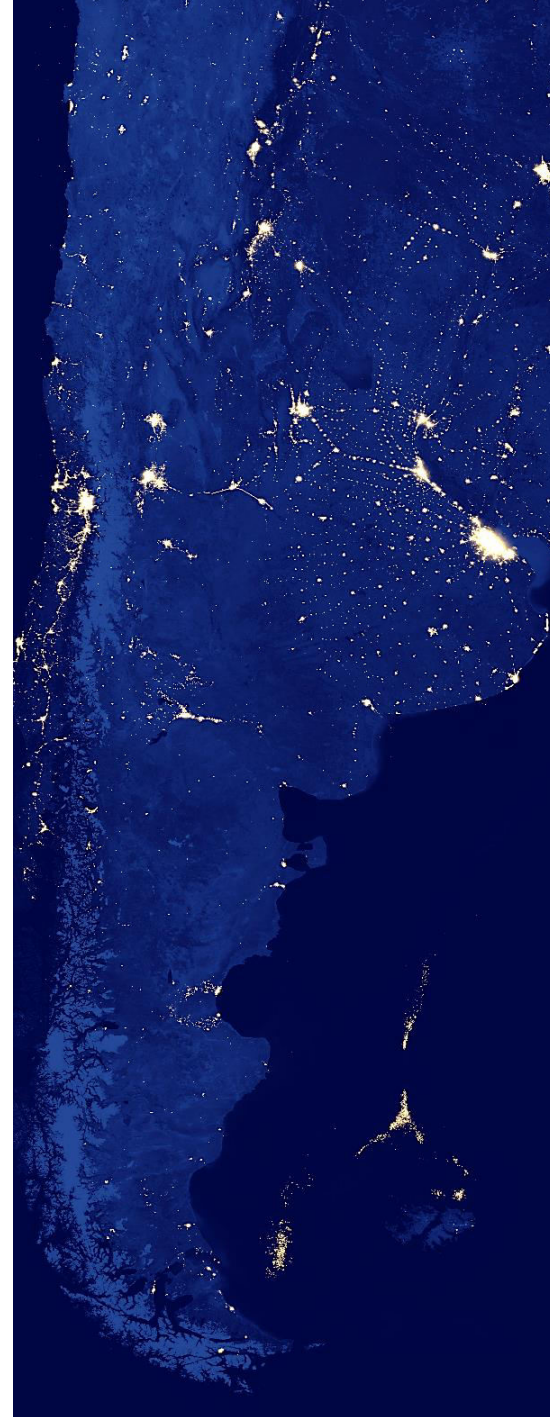
# **“2Mp Education Program from Argentinian Space Agency: Spatial Technology as a learning tool for children and young people”**

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National Commission for Space Activities of Argentina  
(CONAE)

United Nations / Austria Symposium:  
Access to Space: Holistic Capacity-Building for  
the 21st Century

Graz, Austria  
3 - 7 September, 2017



# UEFM

## Education Unit

The aim is to transfer the geospatial technology and knowledge to society.



### 2Mp Program

Destined for students and teachers of the educational environment



### SoPI Project

Destined for workers, professionals and researchers from different socio-economics sectors.





## The 2Mp Program

was created with the objective that children and young people of our country have access and use the satellite technology.

# Inclusion of Satellite Technology through the Educational System.

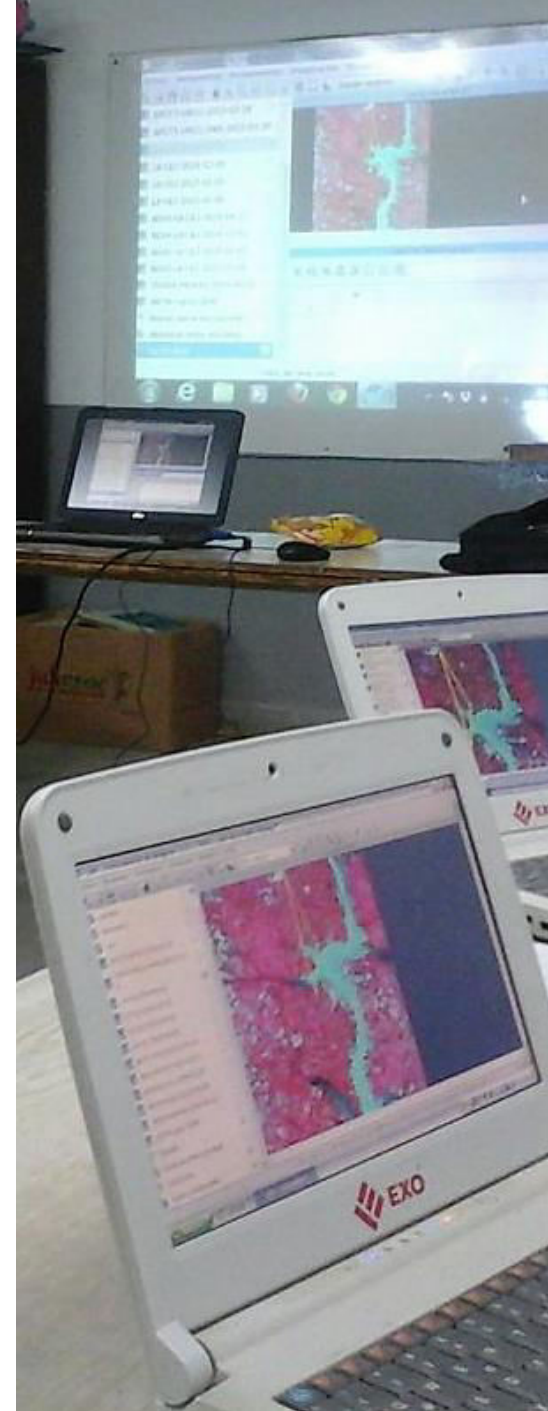
## **Initial Situation**

- ▷ Lack of appropriate software and digital material.
- ▷ Satellite images were not used as a source of information by students and teachers.
- ▷ Absence of training for teachers.

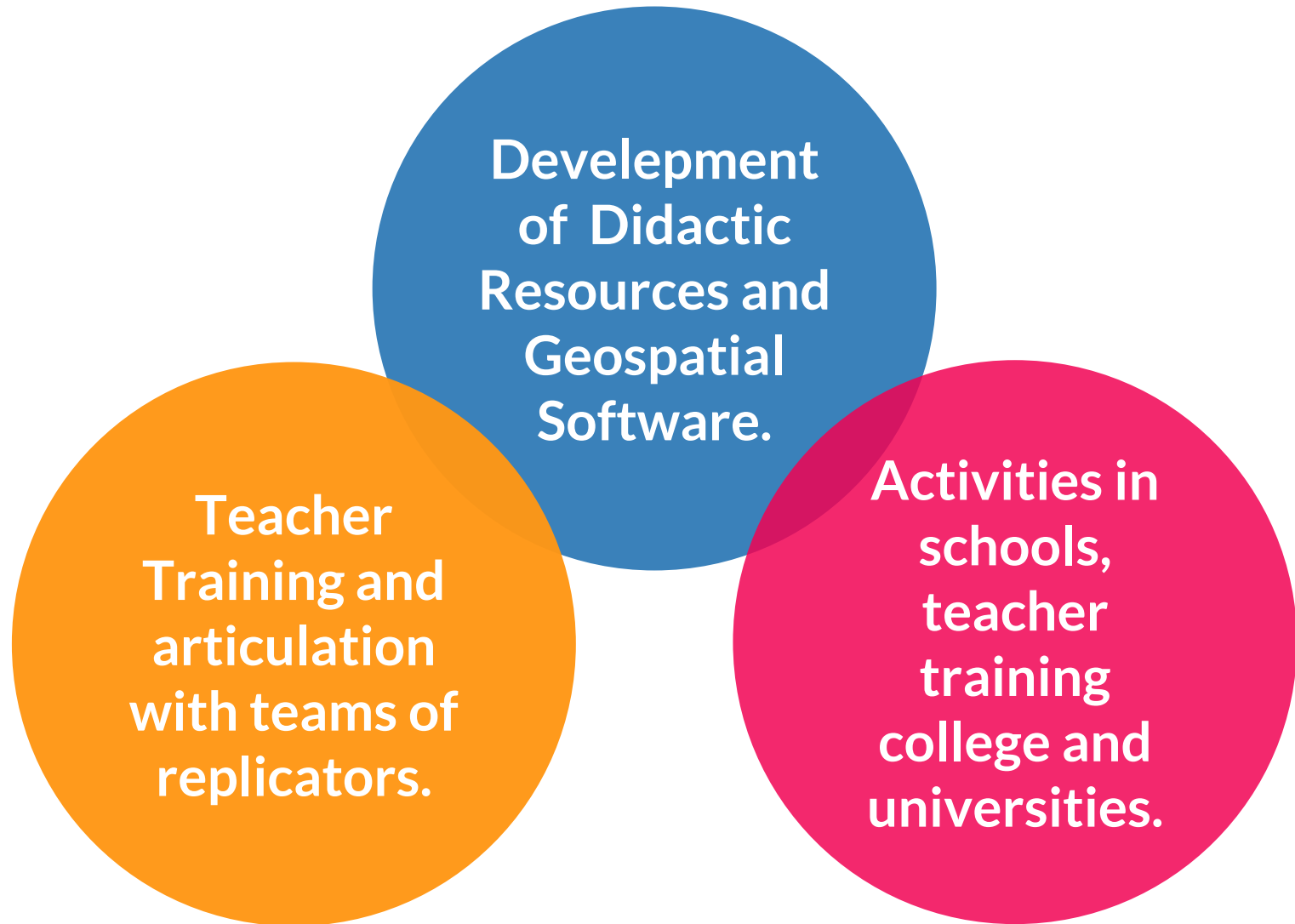
# Integral Educational Proposal

## Purposes

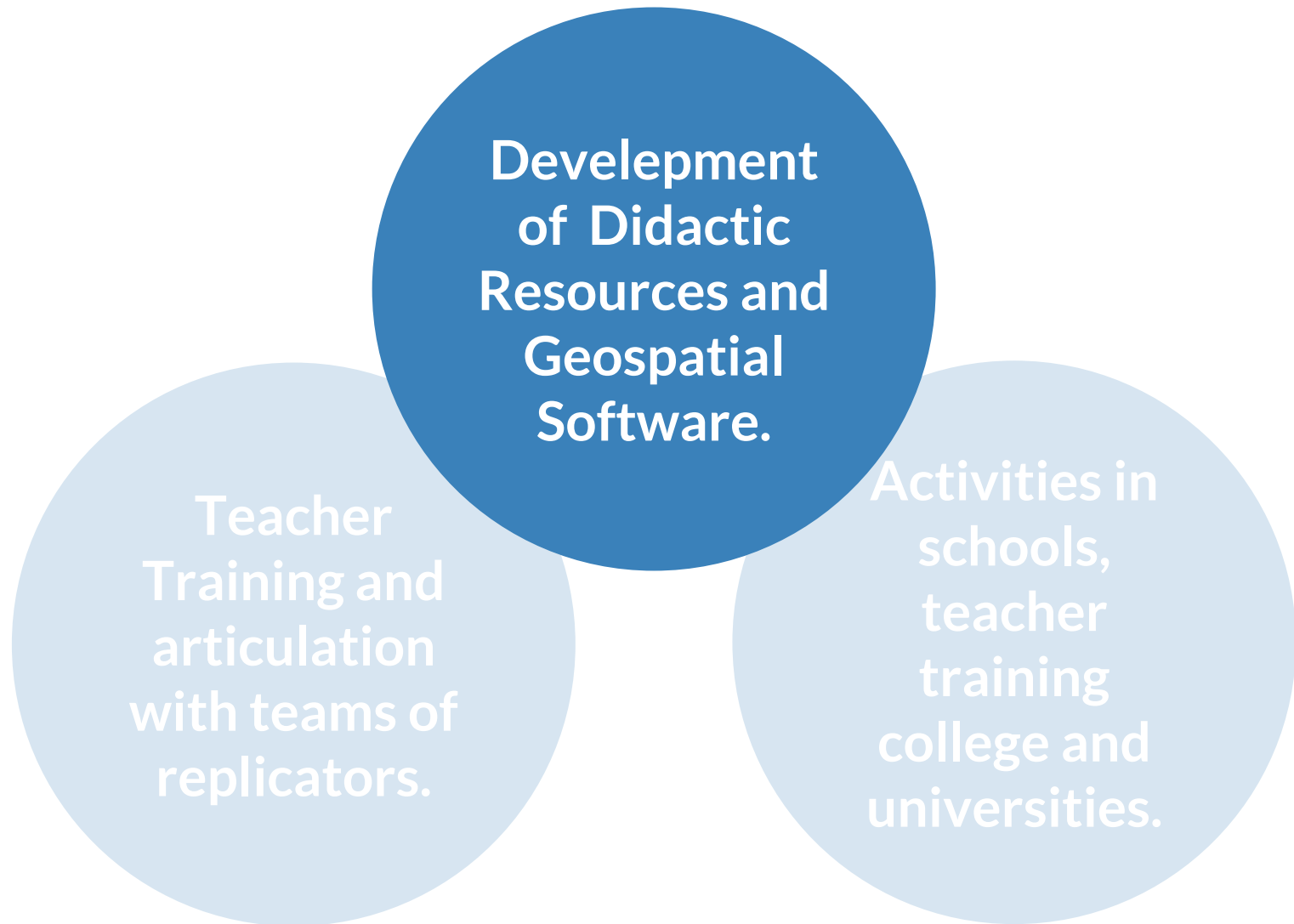
- ➡ **Improving** education by using satellite technology as a powerful tool to expand the reach of knowledge.
- ➡ **Users** students with innovative technologies, which allow them to improve their learning and favor their inclusion working field.
- ➡ **Democratize** the access to geospatial technologies.



# Integral Educational Proposal



# Integral Educational Proposal





# Development of Didactic Resources and Geospatial Software

## Software Geospatial Family



### Software 2Mp

- ▷ Aimed at the simplified handling of satellite information combining it with others sources information.
- ▷ It allows teachers to work on curricular contents through cases studies.
- ▷ Intended for eight years old or older.
- ▷ Low Hardware and Software Requirement.



### SoPI

- ▷ SoPI is Image Processing Software by CONAE
- ▷ 2d/3D GIS intuitive graphics user interface. Fusion of GIS project oriented work environment with remote sensing capabilities.
- ▷ Modular and extensible software design. Common architecture with 2Mp Software. Developed in C++.
- ▷ Low hardware requirements.
- ▷ Advanced users: middle school specializations, technical institutes and universities.

# Software 2Mp

## Contexts

Satellite Images

Vector Coverages

Maps

3D Land Models

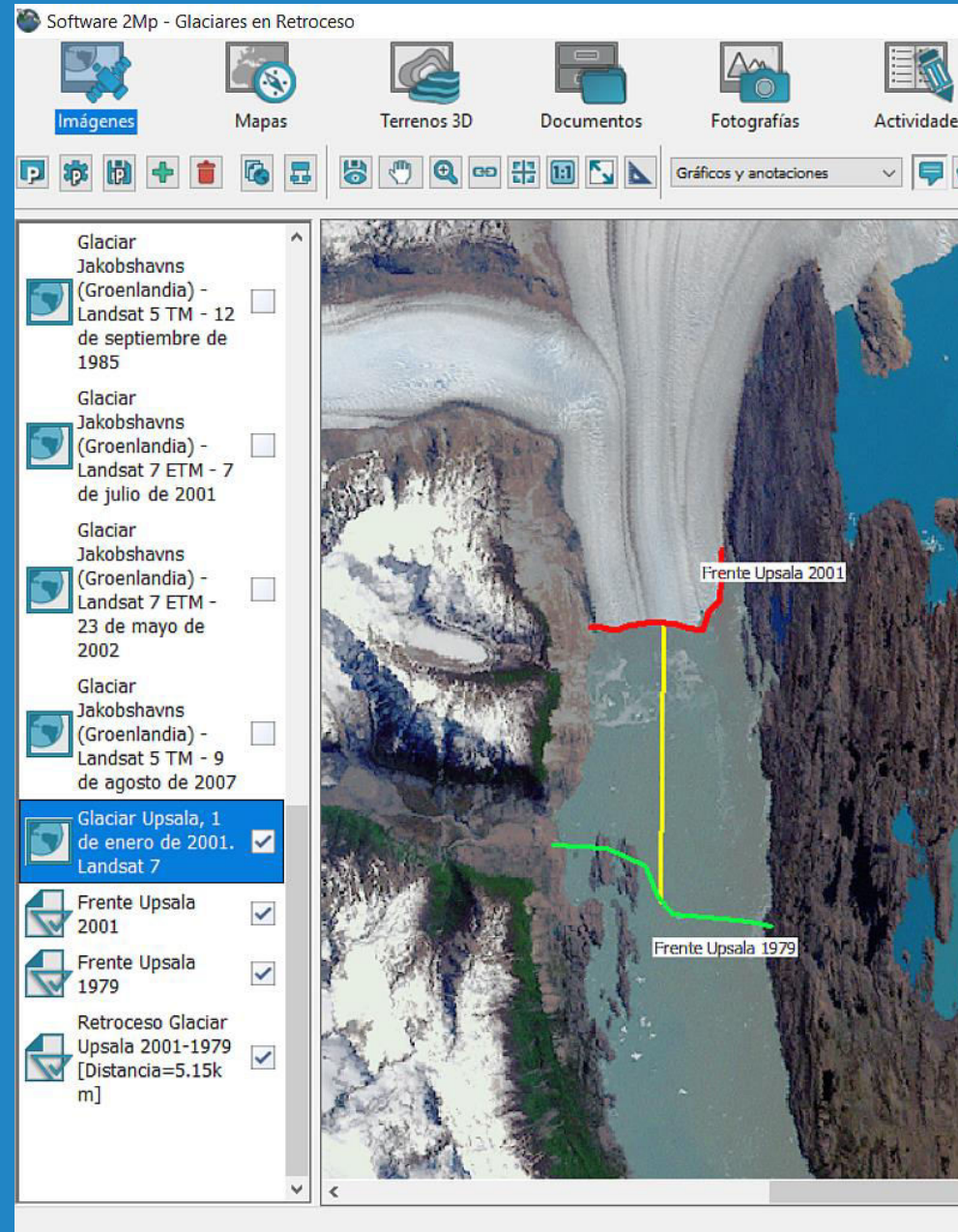
## Tools

Graphics and Notes

Map

Animation

Measurement



# Didactic Resources



**Highlighted Images**



**Images From Different  
Satellite Missions.**



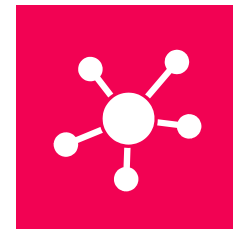
**Vector Coverages**  
generated by different  
specialized organisms



**Highlighted Events**

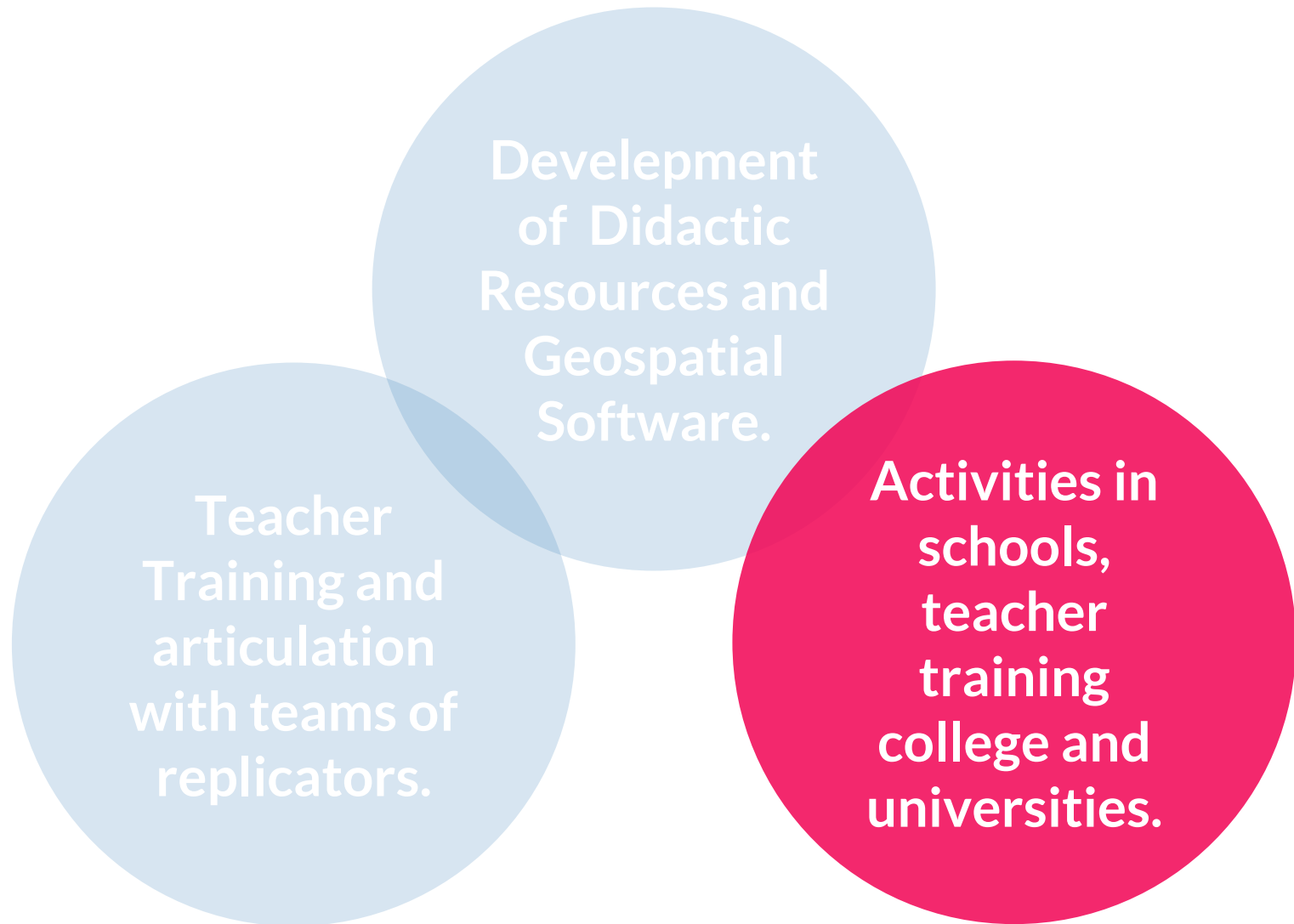


**2Mp Catalog**



**PAT**  
Acronym for “Producto  
Autocontenido Temático”  
(Self-contained Thematic  
Product)

# Integral Educational Proposal



# Activities in schools, teacher training college and universities.

- ✓ Associated Schools
- ✓ Reference Schools
- ✓ Project Schools
- ✓ Associated IFD
- ✓ 2Mp Agro Schools
- ✓ SAE Mission
- ✓ Water Rocket





✓ Schools







✓ Teacher training college











## ✓ SAE Mission



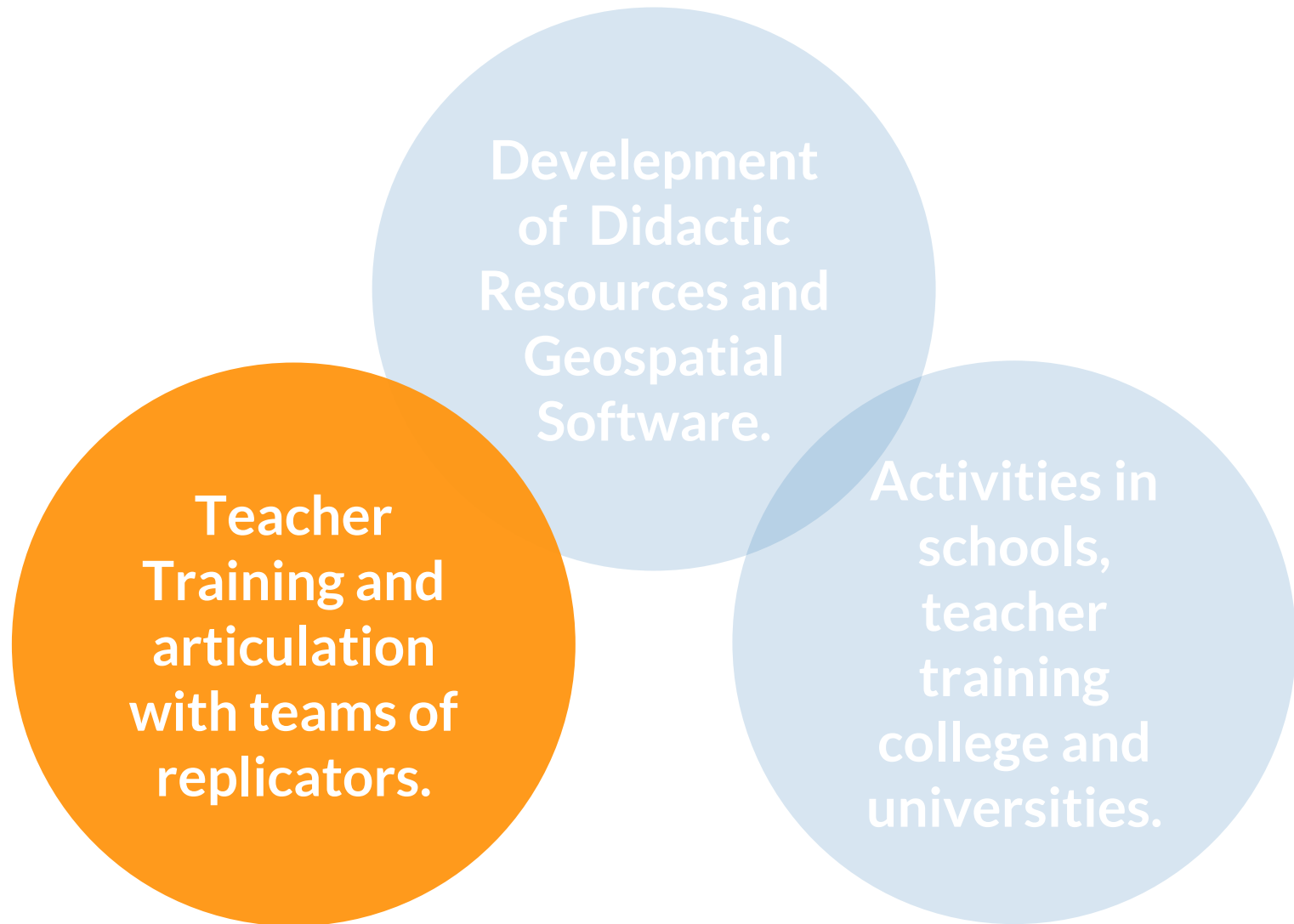




## ✓ Water Rocket



# Integral Educational Proposal

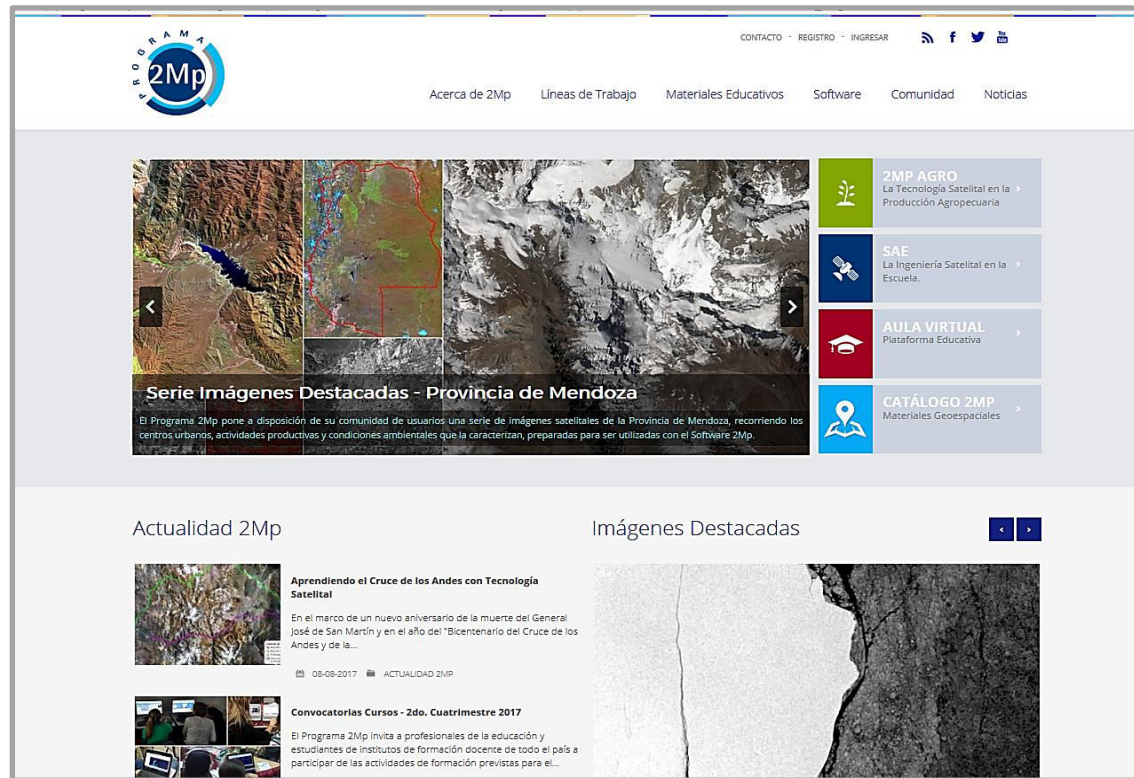


# Teacher Training and articulation with teams of replicators.

- ✓ On-site courses
- ✓ Online courses
- ✓ Seminars
- ✓ Training Teachers Instructor







Web Site  
**2mp.conae.gov.ar**

 **3.5M**  
Students who have Access

 **462K**  
Students use the Program to learn

 **11.748**  
Trained teachers

 **3.344**  
Schools

 **20.716**  
Registered users on website



# Thanks!

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